



AMERICAN INSTITUTES FOR RESEARCH®

**COMPREHENSIVE REPORT:
EVALUATION OF MARYLAND'S
CIGARETTE RESTITUTION FUND PROGRAM**

SUBMITTED TO:



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Department of Health
and Mental Hygiene
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Chapter 4

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Executive Summary

The State of Maryland's Department of Health and Mental Hygiene (DHMH) has commissioned a Comprehensive Evaluation of the Cigarette Restitution Fund Program (CRFP). The evaluation covers the Program's Tobacco Use Prevention and Cessation Program (Tobacco Program), Cancer Prevention, Education, Screening, and Treatment Program (Cancer Program), and its Minority Outreach and Technical Assistance (MOTA) Program. This report highlights the findings of the Comprehensive Evaluation, which describe the progress that has been made since the CRFP began in 2001.

Six overarching questions are addressed in this Comprehensive Evaluation:

1. To what extent were the tobacco and cancer goals met?
2. To what extent was minority outreach and participation achieved?
3. How well did the local community health coalitions work?
4. What impact did funding levels for the cancer and tobacco local public health programs, and the statutory limitations on shifting funding among components have on program implementation and effectiveness?
5. How well did the Statewide Academic Health Centers work?
6. How well did the administration of the program work (State and local)?

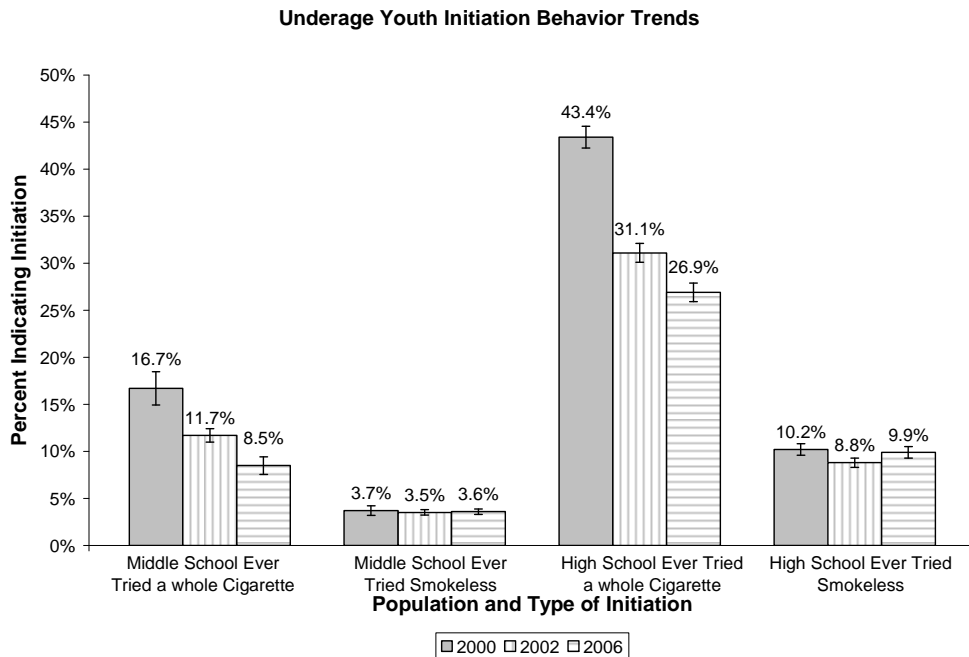
Within each of the six overarching questions, there are sub-questions that represent both process and outcome focused evaluations. It should be noted that not all sub-questions are germane to all three programs. Some pertain only to one or two of the three programs. The following sections highlight the findings on each of the three programs and then address overall administration of the CRFP.

Tobacco Program

Evaluation Question 1. To what extent were Tobacco goals met?

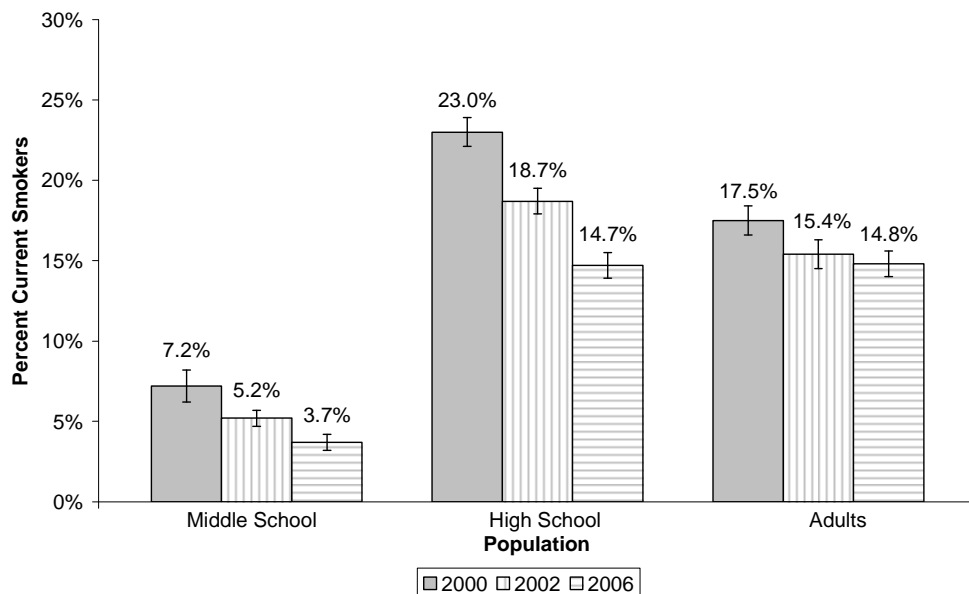
The CRFP Tobacco Program set goals related to reducing initiation and use of tobacco products by Maryland youth and adults, and reducing negative disparities in tobacco use. Most of these goals were met or exceeded. The Program has met its goal to implement and sustain community-based Tobacco programs in each jurisdiction throughout Maryland. Although the media and countermarketing component of the Tobacco Program has undergone changes during the course of the program, Maryland adults are being exposed to media messages about risks of using tobacco and to CRFP media messages about the statewide Quitline.

- The Tobacco Program goals for reducing initiation of cigarette use and smokeless tobacco use among youth under the age of 18 were exceeded for 2002 and 2006, but there was very little change in initiation of smokeless tobacco use over time.
 - There was a 49.1% decrease in initiation of cigarette use among middle school students and a 38.0% decrease in initiation among high school students from 2000 to 2006.
 - There was a 2.7% decrease in initiation of smokeless tobacco use among middle school students and a 2.9% decrease in initiation among high school students from 2000 to 2006.



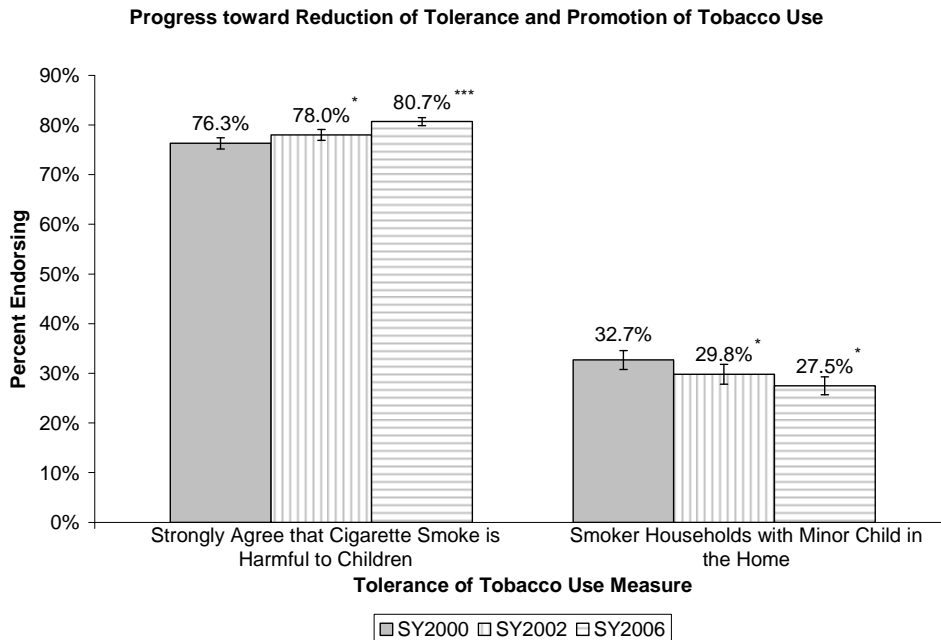
- The Tobacco Program goals for reducing cigarette smoking and smokeless tobacco use among Maryland youth and adults were partially met.
 - The goal estimates for reducing current smoking prevalence among middle school and high school youth were exceeded for each year and current smoking decreased significantly during each survey year from 2000 through 2006 for both groups.
 - The goal estimates for reducing current smoking prevalence among adults were exceeded for each year, and adult cigarette smoking prevalence was significantly lower in both 2002 and 2006 than it was at baseline in 2000.
 - The goal estimates for reducing current smokeless tobacco use among middle school youth and adults were met in 2002, but were not met for high school students during that year. Current smokeless tobacco prevalence remained low across all years.

Current Cigarette Smoking Trends Among Underage Youth and Adults



Source: Maryland ATS and YTS

- Overall, from 2000 to 2006, there were some reductions in disparities between ethnic and racial minorities, as well as between males and females who are current tobacco users.
 - Current tobacco use prevalence among all groups was lower in 2006 than in 2000, and this difference was significant among White, African American, and Hispanic adults, as well as for males and females.
- Maryland adults have seen or heard media messages about risks of tobacco use and the availability of cessation support through their local health departments.
 - Current smokers are significantly more likely to have seen or head these messages than the general public or non-smokers.
- The State has mad progress toward the goal of reducing tolerance and promotion of tobacco use
 - There were significant increases in the percent of adults that strongly agree that cigarette smoke is harmful to children each survey year from 2000 to 2006 and significant decreases in the percent of smoker households with minor children in the home from 2000 to 2002 and 2006.



Source: Maryland ATS

* = Significant change from 2000; ** = Significant change from 2002; *** = Significant change from 2000 and 2002

Although it is not possible to determine whether program activities have had a direct effect on tobacco-related risk behaviors throughout Maryland, there have been positive changes among youth, adults, and minority populations since the inception of the program. Program tracking data indicates that youth and adults participate in CRFP school-based tobacco programs, and adults and priority populations participate in CRFP cessation programs.

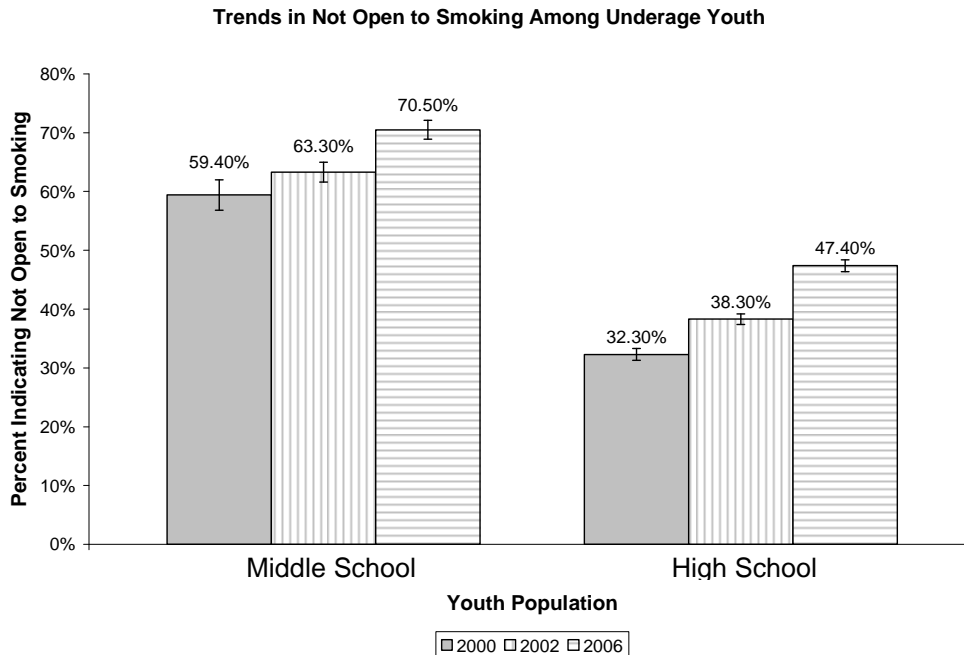
Local Public Health Component Activities

- Community-based program activities accomplished a broad reach over the course of the Program through community coalition, faith-based, and secondhand smoke reduction programs. The program attendance to these program activities reached 1,345,675 since FY2004. Community-based program activities fluctuated with local public health funding.
- School-based activities implemented by local tobacco programs include education, peer programs, smoking cessation programs, staff training, cessation, and reinforcement of school tobacco policies. Program activities target not only youth, but also adults through college programs and education activities for parents of pre-kindergarten students.
- Merchant education on youth access and product placement laws is provided under the enforcement element of the local Tobacco programs. Programs also conducted compliance checks, and issue citations to merchants for noncompliance with sales, product placement and clean indoor air laws and to youth for tobacco possession
- Local cessation activities included conducting cessation groups, providing cessation counseling, and providing smoking cessation aids to individuals who need them to quit. A total of 70,696 attendees have received either group or individual cessation counseling and classes through the local Tobacco programs.

Statewide Tobacco Outcomes

Underage Youth Outcomes

- From 2000 to 2006, current smoking prevalence among middle school youth has been cut nearly in half (49%); among high school youth, there has been a 36% reduction in prevalence from baseline to 2006.
 - The reduction in current smoking trend holds for both males and females across both middle school and high school
- Current use of other forms of tobacco has remained low or decreased over time.
 - Current use of smokeless tobacco is very low among middle school and high school youth overall (~2% and 5%, respectively) and has not changed significantly over time for either group.
 - Among middle school and high school youth, current cigar smoking has decreased over time, likely significantly each survey year since 2000.
 - Statewide current use of any form of tobacco among middle and high school youth declined significantly from 2000 to 2006, from 2002 to 2006, and possibly from 2000 to 2002 as well.
- There has been a significant decline over time in the percent of youth reporting early smoking initiation (i.e., prior to age 11) and significant increases in middle school and high school youth who report not being open to smoking over time.

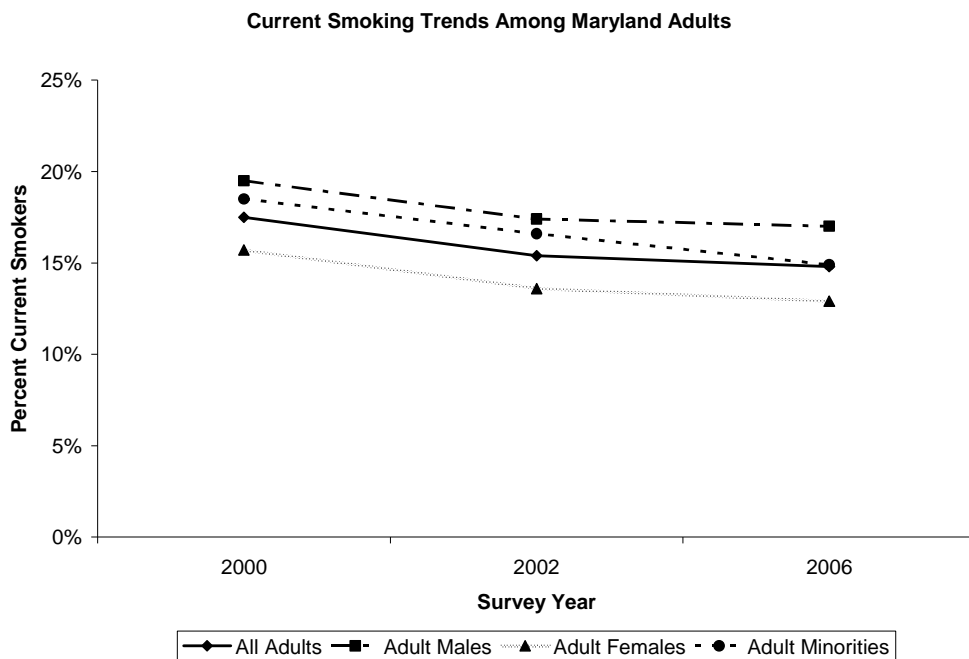


Source: Maryland YTS

Adult Outcomes

- Current cigarette smoking prevalence was significantly lower in both 2002 and 2006 than it was at baseline, and prevalence of adult smokeless tobacco use remained at approximately 1% over time.

- The reduction in the current smoking trend holds for males, females, and minority individuals.



- Current tobacco use declined significantly among all Maryland adults from 2000 to 2006, with significant declines in current tobacco use among males, females, and minorities during this time period.
- While attempts to quit are declining across the state, the likelihood of succeeding in an attempt to quit seems to be improving. Although there is no net change from baseline to 2006 in the percent of adults that indicated they attempted to quit smoking during the past 12 months, there was a significant increase in the percent of adults indicating that they had successfully quit smoking.
- The proportion of households that have rules against smoking in the home increased significantly each survey year since baseline, and this was true overall, among minority households, and among households in which there is a smoker.

Economic Impact of the Tobacco Program

- For every individual who does not start smoking, or who quits smoking, there is a real impact on the economy of Maryland over the individual's lifetime. Overall, it is estimated that smoking costs Maryland over \$2.2 billion in adult medical expenditures and over \$3 million in neonatal medical expenditures annually. Added to the excessive medical cost of smoking are productivity loss and the value of potential years of life lost, which are estimated to be \$1.8 billion and \$10.6 billion each year, respectively, the total annual cost of smoking in Maryland exceeds \$14 billion. It is estimated that \$967 million in adult medical expenditures and \$1.2 million in neonatal medical expenditures can be saved annually if smoking prevalence in Maryland is reduced to the target level set by the Maryland Health Improvement Plan 2000- 2010 (MDHMH, 2001).

Maryland Quitline

- Between June 2006, when the Maryland Quitline was put into place and January 2007, 1,964 tobacco users called the Quitline, and most of the callers heard about the Quitline through television or radio advertising.

In accordance with the statutory requirements, Maryland's CRFP Tobacco Program follows CDC recommendations in terms of program components. However, Maryland's funding of its tobacco control program and most of its elements have been consistently under-funded with respect to CDC's recommended levels.

- Maryland's tobacco control programs have been chronically under-funded. In FY2005 and FY2006, the overall budget was approximately one third of what is recommended by CDC using the lower range of recommended per capita expenditures.

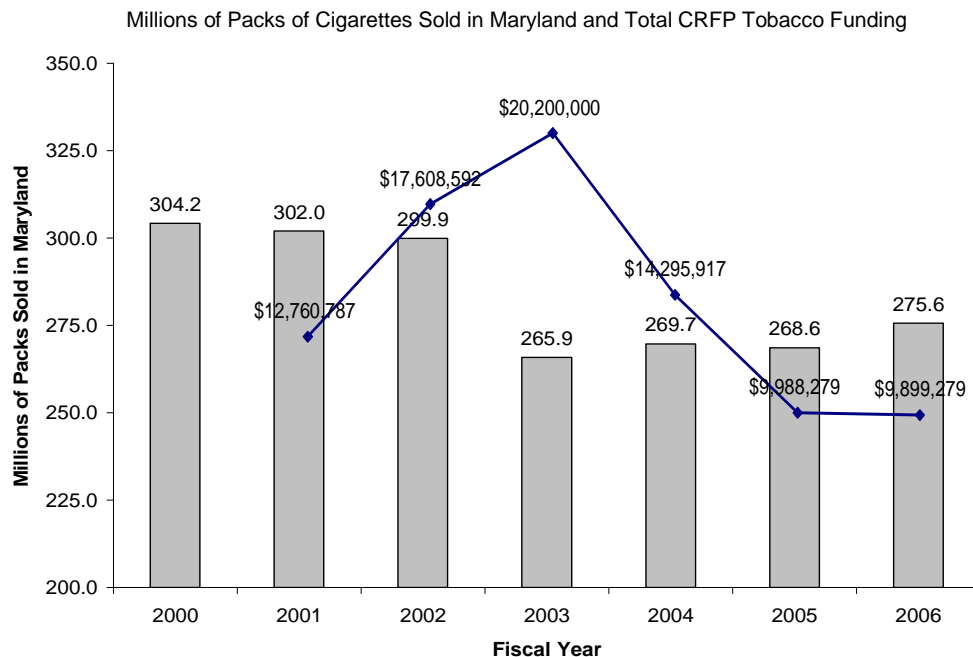
Smoking prevalence among Maryland adults has been consistently lower than the national prevalence. Additionally, Maryland's adult smoking prevalence is lower than its neighboring states and Maryland compares favorably with some of the states that have more stringent clean indoor air laws, those with higher tobacco taxes, and those that spend more money per capita on tobacco control. Maryland has a lower youth smoking prevalence than the nation, and compares favorably to its neighboring states with respect to this measure.

Although the goals of the Tobacco program are set at the State level, local program coordinators are familiar with, and depend upon State and local level prevalence data, as well as the CDC Best Practices guidelines, and coalition member input to plan their local program activities.

- State level surveillance and evaluation activities have provided youth and adult tobacco surveys in 2000, 2002, and 2006.
 - Availability of adult and youth tobacco data on biennial schedule would be sufficient for most local program planning needs.

Statewide policy measures that have helped the Tobacco Program include a statewide smoking ban in which smoking is not allowed in most indoor public places, statewide policies that limit youth access to tobacco products, and a 2003 tax increase on cigarettes. A statewide indoor smoking ban was passed by the General Assembly during the 2007 legislative session.

- In 2007, Maryland's General Assembly signed a bill for a statewide smoking ban on all indoor public places.
- The tax increase on cigarettes in 2003 may have helped reduce cigarette sales in the State, but a continuing effect may be moderated by reductions in Program funding.



Source: MD Comptroller, 20 pack equivalents

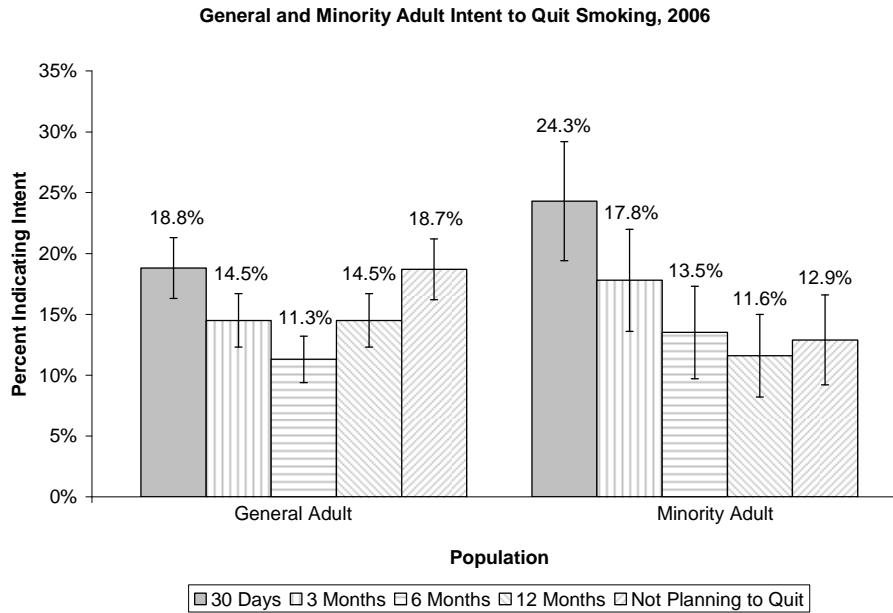
The main factors that have helped program implementation at the local level are having the support of the local health department, capable and knowledgeable subvendors and staff, and funding to implement their programs. The main factor that has hindered local program implementation is funding fluctuations, which make it difficult for programs to maintain subvendor relationships and consistent staffing for their programs.

The main change to the Tobacco Program that local programs would like to see is for the State to loosen the grant specified funding requirements so that programs have more flexibility to tailor their programs to the needs of their communities. Other changes included improving and increasing communication between local programs and the State and among local programs, reducing reporting requirements, and increasing training opportunities.

Evaluation Question 2. To what extent was minority outreach and participation achieved?

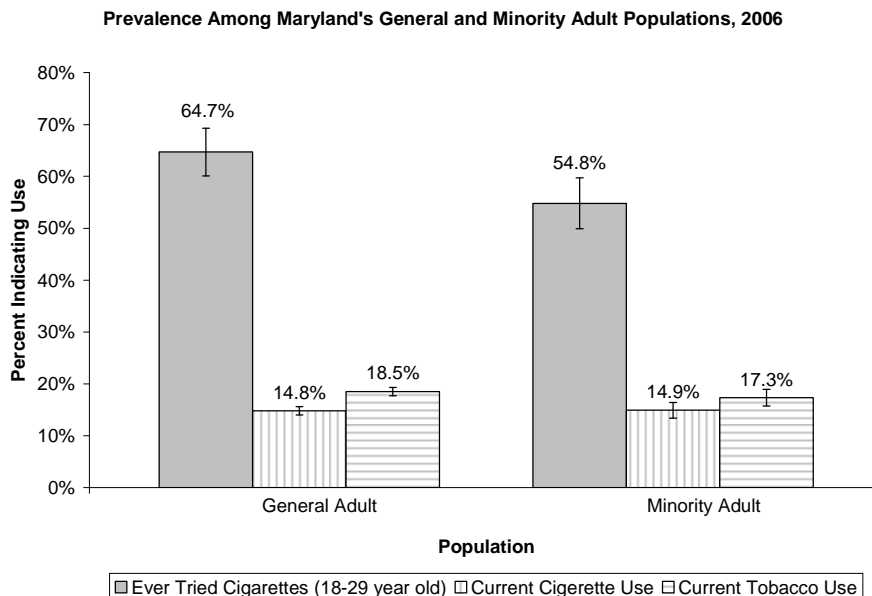
Local Tobacco programs are conducting activities to specifically target minorities in their jurisdictions. Cessation programs in the jurisdictions are serving appropriate proportions of minority individuals, and the proportion of minority individuals participating in cessation groups has increased over time.

- Adult minority current smokers in Maryland report greater intentions to quit smoking within the next one to six months, and are less likely to report having no intention to quit smoking than the general Maryland population, though these differences are not significant.



Source: 2006 Maryland ATS

- Minority individuals between the ages of 18 and 29 are significantly less likely to ever have tried a cigarette than the general population.
- Current cigarette and tobacco use among Minority adults is similar to that of the general population.



Source: 2006 Maryland ATS

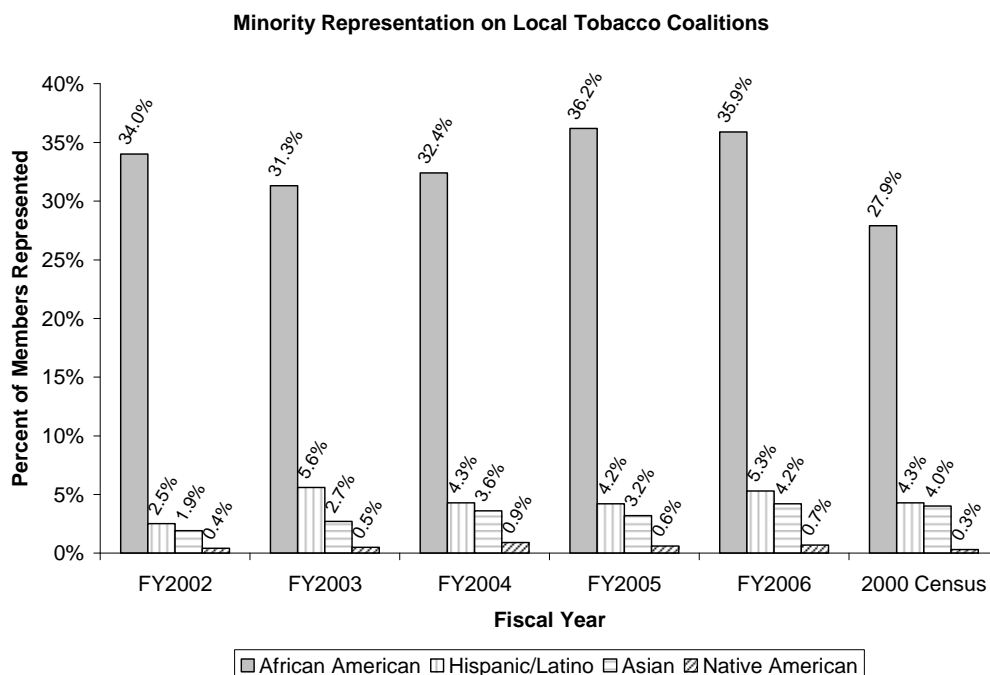
The main factor that helps local Tobacco programs to provide community outreach is having coalition members that can provide links to the community. MOTA's role in helping to recruit minority individuals onto the coalitions is an important one for the Tobacco Program. Most local Tobacco coordinators are satisfied with the efforts of MOTA in supporting this activity, but some indicated that they have some difficulties communicating with and understanding the role of their MOTA vendors.

The main change to minority outreach suggested by the Local Tobacco program coordinators was improved communication between the local MOTA programs and the local Tobacco programs. However, many local Tobacco program coordinators do not see any need for changes to minority outreach.

Evaluation Question 3. How well did the local community health coalitions work?

Across Maryland, tobacco coalition memberships show ethnic and racial diversity of memberships that are consistent with the proportion of each racial and ethnic group in the State population. Various community organizations, including local health departments, health care providers, non-profit and faith-based organizations, schools, and other agencies are represented on the local Tobacco coalitions. Local Tobacco coalition members contribute to local program planning by providing ideas and suggestions, helping to create the annual plans, and providing important links to the community for the Tobacco Program.

- Representative proportions of African American and Native American coalition members were achieved overall each year. The proportion of Hispanic/Latino membership fell short of the population proportion in FY2002 and FY2005. The proportion of Asian membership fell short of the population proportion in all years but FY2006.



Source: Annual Tobacco Grant Applications

The main factors that contributed to the success of the local Tobacco coalitions include the coalition members' connections with the community, the training and guidance that they receive from the local health departments, and the commitment that they have to supporting tobacco control in Maryland are the most important facilitators for the coalitions. The main factors that hindered the success of the local Tobacco coalitions included the time constraints that make it difficult for coalition members to take more active leadership roles, and the difficulty in finding meeting times to accommodate all of the members of the coalition.

The suggested coalition changes from the local perspective included having more community members not associated with organizations that receive funding on the coalitions and increased leadership roles

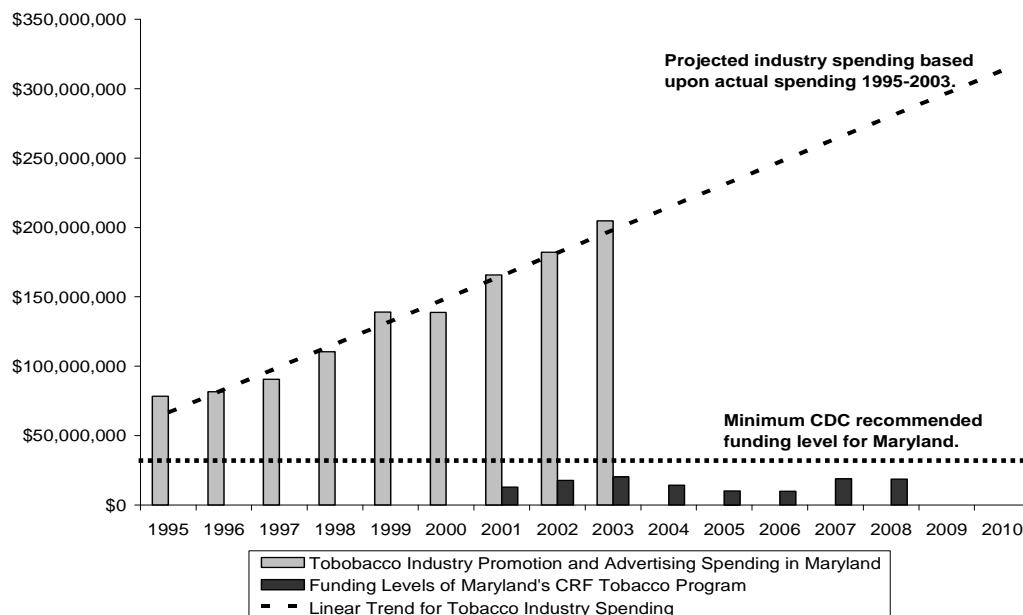
taken on by coalition members. From the State perspective, having a funded position at local health departments to provide support to coalitions or to alternatively have one funded position that provides support to coalitions across regions would be a beneficial change to the Tobacco coalitions.

Evaluation Question 4. What impact did funding levels for the Tobacco local public health programs, and the statutory limitations have on program implementation and effectiveness?

Local Tobacco program coordinators and Local Health Officers indicated that fluctuations in funding levels are a barrier to program performance because they make it difficult for programs to maintain full time staff for their programs, and to maintain interest among subvendors. Some local health officers indicated that the lack in flexibility for how funds can be spent by local programs makes it difficult for local programs to fund interventions and activities that they think will be effective, but that don't fall neatly into the funding categories.

- The CDC recommends a minimum funding level of \$30.3 million per year for a comprehensive State Tobacco program in Maryland. CRFP Tobacco funding has ranged from a high of \$20.2 million in FY2003 to a low of \$9.9 million in FY2005 and FY2006. At the same time, the tobacco industry continues to increase its expenditures to promote smoking in the State.

Tobacco Industry Promotion and Advertising Spending, CRF Tobacco Program Funding Levels, and CDC Recommended Funding Levels for the State of Maryland



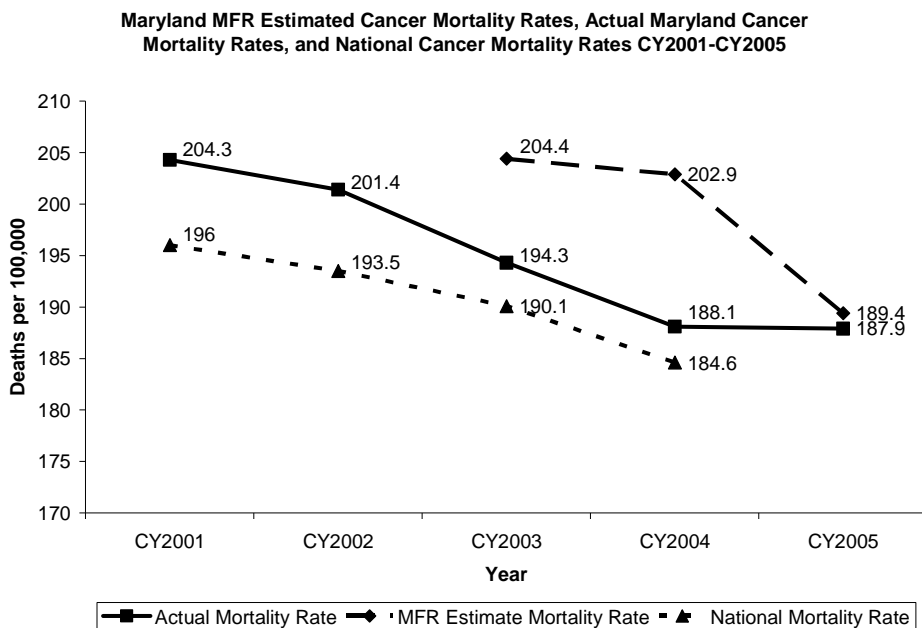
Sources: Tobacco industry spending in Maryland – TobaccoFreeKids.org;
Funding levels of Maryland's Tobacco CRFP Program – Maryland DHMH;
Minimum CDC Recommended Funding Levels for Maryland – CDC Best Practices for Comprehensive Tobacco Control Programs

Cancer Program

Evaluation Question 1. To what extent were Cancer goals met?

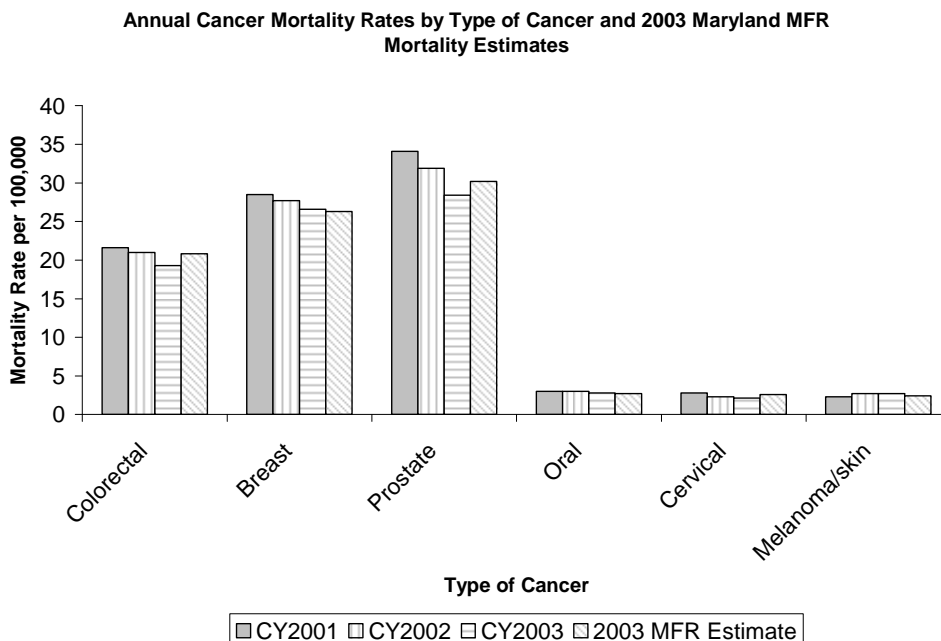
The CRFP Cancer Program set goals related to reducing mortality due to the seven targeted cancers and providing no-cost screenings to uninsured and under-insured individuals throughout Maryland. While the goal for a reduction in mortality due to cancer overall was exceeded for each year, accomplishments of goals for provision of screenings were mixed.

- The Cancer Program MFR goals for reducing the overall cancer mortality rate in Maryland were exceeded for each year in which goals were set.
 - Although the mortality rate in Maryland has remained higher than the nation, Maryland's mortality rate due to all forms of cancer decreased each year from 2001 through 2004, and appears to have stabilized in 2005.
 - Compared to other states and the nation, Maryland's mortality rate due to all forms of cancer improved from a relative ranking of 15th highest to 23rd highest in the nation.
 - The overall cancer mortality rate for each year was lower than the DHMH Cancer Program goal estimates for 2003 through 2005.



Source: Estimates – Annual MFR Reports prepared by DHMH; Actual mortality rates – Maryland Vital Statistics; CDC Vital Statistics
Note: No goal estimates were provided for CY2001 and CY2002

- The Cancer Program goals for reducing cancer mortality due to six of the targeted cancers in CY2003 were partially met.
 - Mortality rates due to colorectal, breast, prostate, oral, and cervical cancers declined each year from 2001 through 2003. Additionally, Maryland improved from a relative rank of 7th highest colorectal cancer mortality rate to 24th highest in the nation.
 - Mortality rates due to melanoma and other skin cancers increased from 2001 to 2003.
 - 2003 mortality rates for colorectal, prostate, and cervical cancers were at or below the goal mortality rates set by the Program for that year.



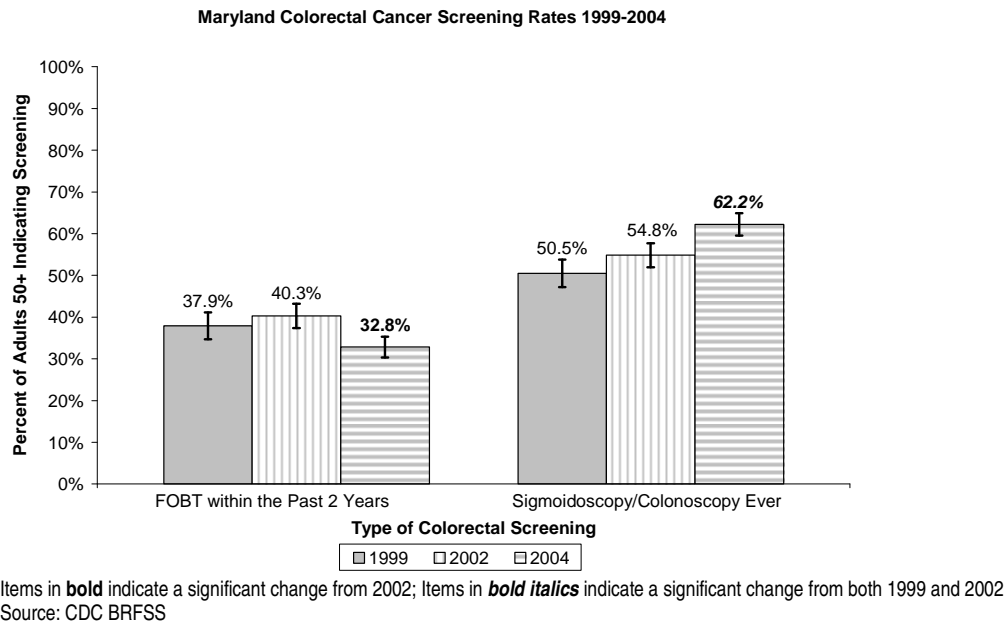
Source: 2003 MFR estimates – Annual MFR reports prepared by DHMH; Actual mortality rates – Maryland Vital Statistics, Maryland Cancer Report

- With a few exceptions, most of the goals that were set for provision of colorectal, breast, and prostate cancer screenings for each year from 2003 through 2006 were met or exceeded.
 - Colorectal cancer screening goals were exceeded in all years but 2006.
 - Breast cancer screening goals were exceeded in all years.
 - Prostate cancer screening goals were exceeded in all years but 2003.

Although it is not possible to determine whether program activities have had a direct effect on screening behaviors throughout Maryland, there have been some increases and some decreases in population based screening trends over time.

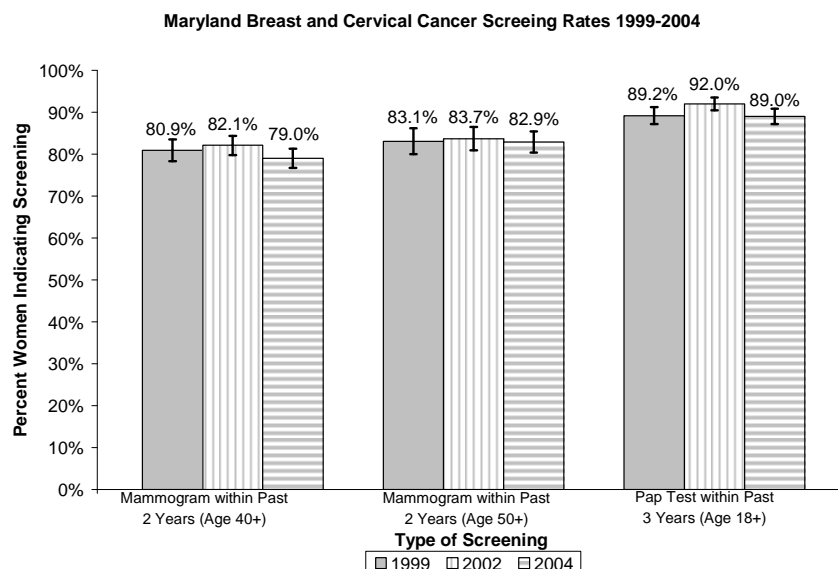
Colorectal Cancer

- In 2001, there were 20 jurisdictions providing colorectal cancer education and 20 jurisdictions providing colorectal cancer screenings. In 2006, there were 22 jurisdictions providing colorectal cancer education and 22 jurisdictions providing colorectal cancer screenings.
- Between 2001 and 2006, there were 255,860 attendees at CRF Cancer Program one-on-one or group education sessions about colorectal cancer, and the CRF Cancer Program provided 17,409 no-cost colorectal cancer screenings to Maryland residents.
- According to BRFSS, there has been a decreasing trend of colorectal cancer screenings using FOBT kits, but an increasing trend of colorectal cancer screenings using sigmoidoscopy or colonoscopy in Maryland.
 - These findings mirror the trends of screening provision through the Program: while there has been a decrease in the provision of FOBT screenings, there has been an increase in provision of colonoscopy screenings.



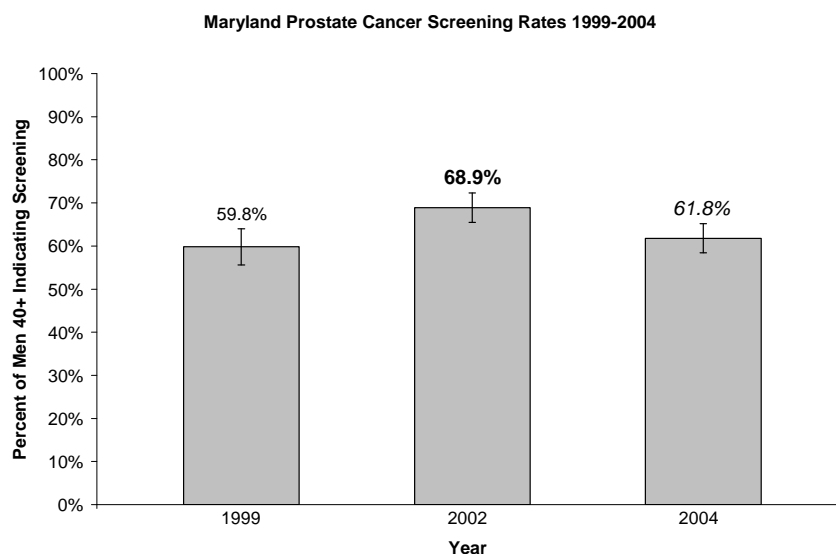
Breast and Cervical Cancer

- Between 2001 and 2005, the number of jurisdictions providing education about breast and cervical cancer increased from three to 11, and the number providing screenings increased from one to five.
- Between 2001 and 2006, there were 54,661 attendees at CRF Cancer Program one-on-one or group education sessions about breast and cervical cancer, and the CRF Cancer Program provided a total of 8,177 no-cost breast cancer screenings and 3,673 no-cost cervical cancer screenings to women in Maryland.
- According to BRFSS, there is a consistently high rate of breast and cervical cancer screenings among women in Maryland.



Prostate Cancer

- In 2001, there were two jurisdictions providing education about and screenings for prostate cancer. In 2006, there were 10 jurisdiction providing education about and six jurisdiction providing screenings for prostate cancer.
- Between 2001 and 2006, there were 57,037 attendees at CRF Cancer Program one-on-one or group education sessions about prostate cancer.
- Between 2001 and 2006, the CRF Cancer Program provided a total of 5,486 no-cost prostate cancer screenings to men in Maryland.
- According to BRFSS, the percent of men indicating that they had received a prostate-specific antigen test (PSA) increased significantly from 1999 to 2002, but decreased significantly in 2004.



Items in **bold** indicate a significant increase from 1999; items in *italics* indicate a significant decrease from 2002
Source: CDC BRFSS

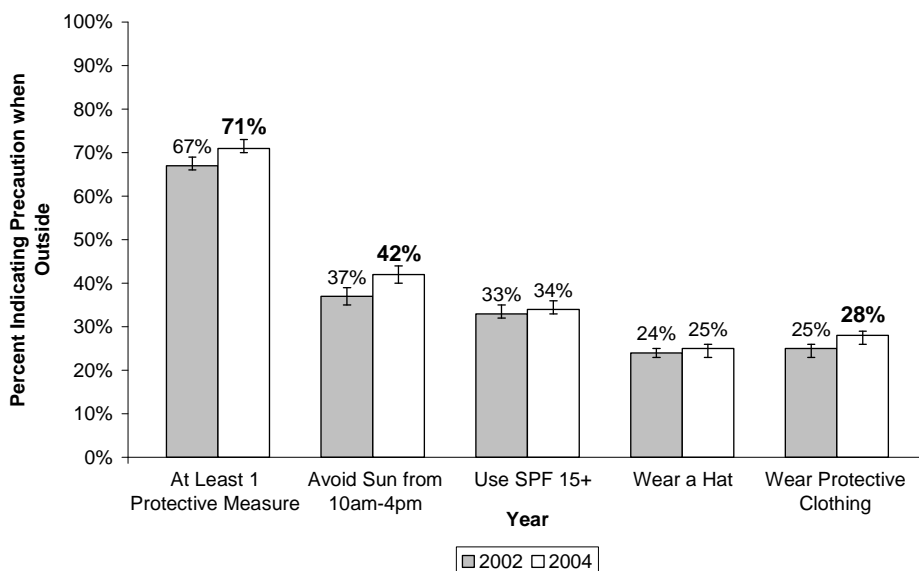
Oral Cancer

- In 2001 there was one jurisdiction providing education about, and two jurisdictions providing screenings for oral cancer. In 2006, there were six jurisdictions providing education about, and three jurisdictions providing screenings for oral cancer.
- Between 2001 and 2006, there were 10,988 attendees at CRF Cancer Program one-on-one or group education sessions about oral cancer.
- Between 2001 and 2006, the CRF Cancer Program provided a total of 6,105 no-cost oral cancer screenings to Maryland residents.
- According to The Maryland Cancer Survey, the number of adults age 40 and over indicating that they had ever had an oral cancer screening remained stable at 43% from 2002 to 2004. There was also no significant change in the prevalence of annual oral cancer screenings from 2002 (33%) to 2004 (34%).

Skin Cancer

- In 2001, there was one jurisdiction providing education about skin cancer. In 2006, there were 15 jurisdictions providing education about skin cancer.
- Between 2001 and 2006, there were 78,440 attendees at CRF Cancer Program one-on-one or group education sessions about skin cancer.
- Between 2001 and 2006, the CRF Cancer Program provided a total of 2,004 no-cost skin cancer screenings to Maryland residents.
- According to the Maryland Cancer Survey, adults in Maryland are showing increases in behaviors to protect themselves against skin cancer.
 - There was a significant increase in adults reporting at least one protective measure to reduce the risk of skin cancer from 2002 to 2004.
 - From 2002 and 2004, there was a significant increase in adults reporting that they always or nearly always avoid the sun between 10:00 AM and 4:00 PM.
 - The number of adults reporting that they always or nearly always wear protective clothing when outdoors for an hour or more on a sunny day increased significantly from 2002 to 2004.
 - Although the increases were not significant, those indicating that they always or nearly always use sunscreen with a SPF rating of 15 or higher, and who indicated that they wear a hat that shades their face, ears and neck when outdoors increased from 2002 to 2004.

Skin Cancer Protective Behaviors 2002-2004



Items in **bold** indicate a significant increase from 2002
Source: Maryland Cancer Survey 2002, 2004

Although the goals of the Cancer program are set at the State level, local program coordinators are familiar with, and depend upon State level incidence and mortality data, as well as evidence-based screening recommendations, available guidelines, data and coalition member input to plan their local program activities. State level surveillance and evaluation activities have ensured that sufficient updated data is available to the local programs.

- The Surveillance and Evaluation Unit established systems for data collection and dissemination of findings to local programs and stakeholders. The Unit accomplished the following:
 - Computerized tracking systems were created to collect local screening activity data and local education activity data that can be examined at the jurisdiction and State level.
 - Baseline and annual follow-up cancer studies were implemented to provide information on cancer incidence, mortality, and stage of disease at diagnosis, statewide screening levels, public health evidence, and public health interventions for the seven targeted cancers.
 - In 2002 and 2004 (and planned for 2006), the Maryland Cancer Survey, a population-based survey examining cancer risk and screening behaviors in Maryland, was fielded.
 - In 2003, a physician survey to help explain findings from the Maryland Cancer Survey was fielded.
 - In 2005, a trailer park survey and a Latino Cancer Survey were fielded to assess cancer risk and screening behaviors of individuals most likely to fall in the target population of the Cancer Programs (low SES, uninsured, or underinsured).

According to local Cancer program coordinators and local health officers, the main factors that have helped Cancer Program implementation at the local level are having the supportive relationships with care providers, having knowledgeable and capable staff, having funding to implement their programs, and having good communication with and support from DHMH. The main factors that have hindered local Cancer program implementation are lack of funding to support screening demands in communities and to support treatment of cancers that are detected through the programs' screening activities, and funding fluctuations which create problems with program planning and continuity.

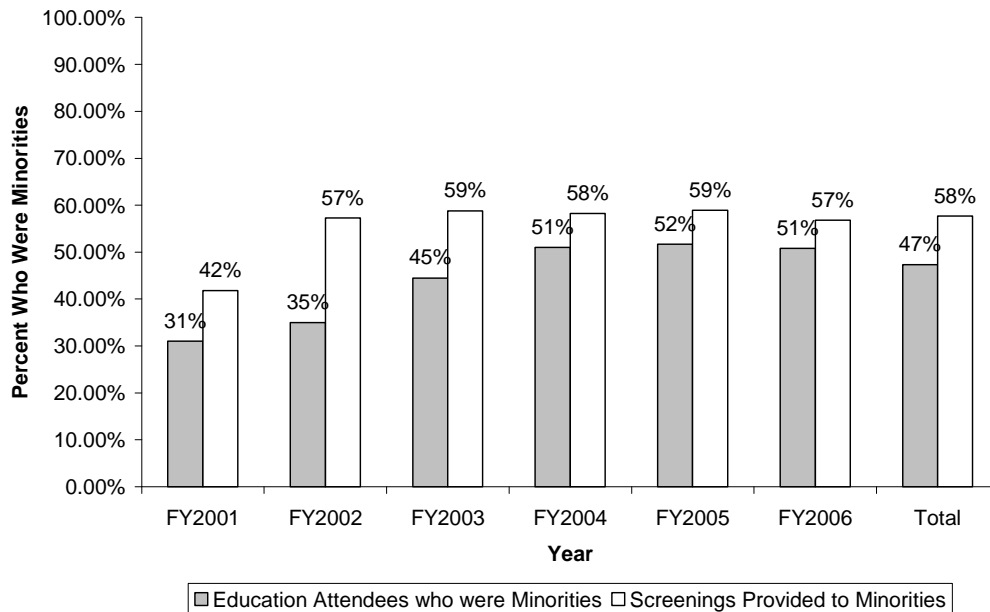
Most of the Cancer Program changes that local Cancer program coordinators suggested were administrative in nature. The biggest concerns and requests for change related to funding. Other suggested changes included reducing reporting requirements and clarifying the goals and vision of the Program including specification of the local goals as well as the overarching statewide goals.

Evaluation Question 2. To what extent was minority outreach and participation achieved?

Overall, the proportion of minorities served through the education and screening activities of the CRF Cancer Program exceeded the proportion of minorities in the State. The overall cancer mortality rate for African Americans has declined each year since 1999. Although African Americans continue to suffer a higher mortality rate due to cancer than Whites in Maryland there has been a reduction in this disparity over time.

- Since 2001, a total of 251,858 minority individuals attended one-on-one or group cancer education sessions and 21,780 cost-free cancer screening services were provided to minority individuals.

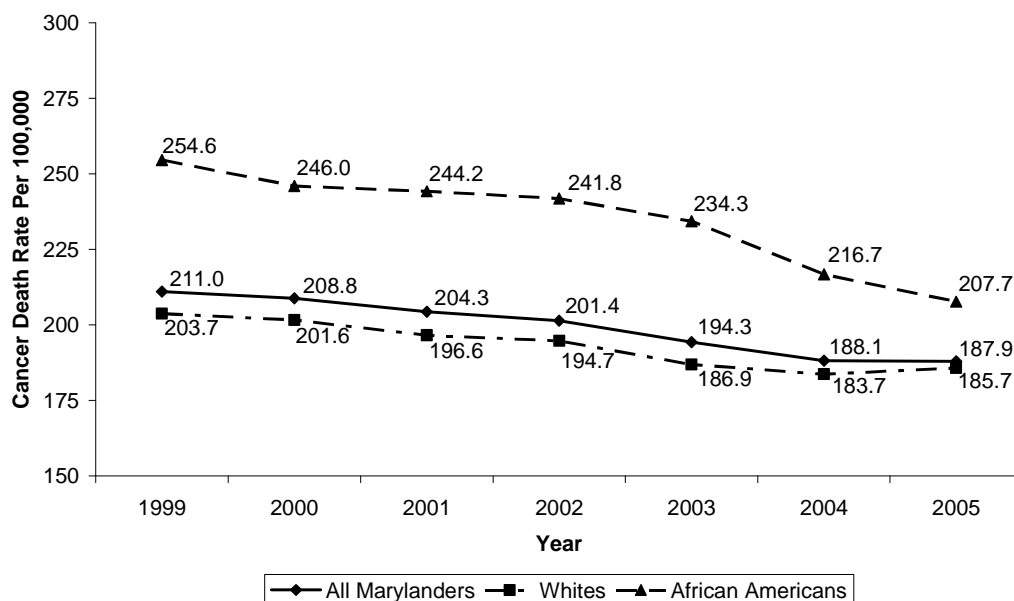
Proportion of Education and Screening Activities Provided to Minorities



Source: DHMH Cancer Education and Screening Databases, November 2006; DHMH Breast and Cervical Cancer Database, April 2006

- The Cancer mortality disparity is decreasing between African American and White Marylanders, as noted by the greater decline in mortality rates for African Americans. However, the cancer mortality rates among African Americans remain higher than for Whites.

Maryland Cancer Mortality Rates Overall, among Whites, and among African Americans



Source: Maryland Vital Statistics

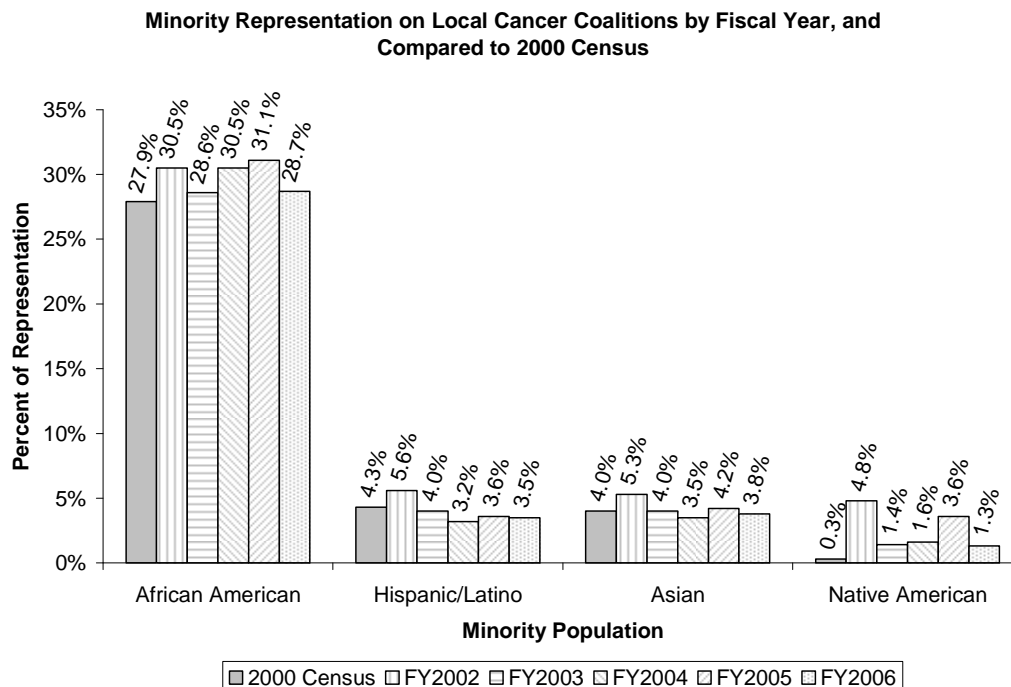
The main factors that help local Cancer programs to provide community outreach are working with faith-based and community organizations, taking culturally appropriate perspectives on outreach, and opportunities to conduct outreach in person and face-to-face. The main barriers identified to providing community outreach to minority populations are competing health priorities for minority populations and lack of minorities in some jurisdictions.

The main changes to minority outreach suggested by the Local Tobacco program coordinators were provision of additional training and technical assistance around reaching hard to reach minorities, and to assist with working around language barriers. In smaller jurisdictions, where traditional minority populations are sparse, local Cancer programs suggested that redefining "minority" may enhance their abilities to conduct outreach to other underserved populations. DHMH CRFP staff suggested that coordinating needs and expectations between local programs and MOTA could help enhance outreach.

Evaluation Question 3. How well did the local community health coalitions work?

The Cancer Program local health coalitions constantly contained representative proportions of African American and Native American members, but representation from Hispanic/Latino and Asian populations fluctuated over time. Various community organizations, including local health departments, health care providers, non-profit and faith-based organizations, schools, and other agencies are represented on the local Cancer coalitions. Coalition members assist with program planning and provide a link to the community that enhances the programs.

- While representative proportions of African American and Native American coalition members were achieved overall each year, the proportion of Hispanic/Latino and Asian membership fell short of their population proportions.



Source: Annual Cancer Grant Applications

- Local Cancer program coalitions meet an average of four or more times per year, and most coalition members who responded to the Coalition Members Survey attend at least one meeting per year. Although, according to local Cancer program coordinators, the main reason that coalition members joined the coalitions early on was because they were interested in obtaining funding, over time, the coalition members have become people who have a vested interest in cancer screening, prevention, treatment, and education.
- Coalition members are an integral part of the planning process for the local Cancer programs. They assist in planning and development of the local programs as well as providing input about the needs of their communities.

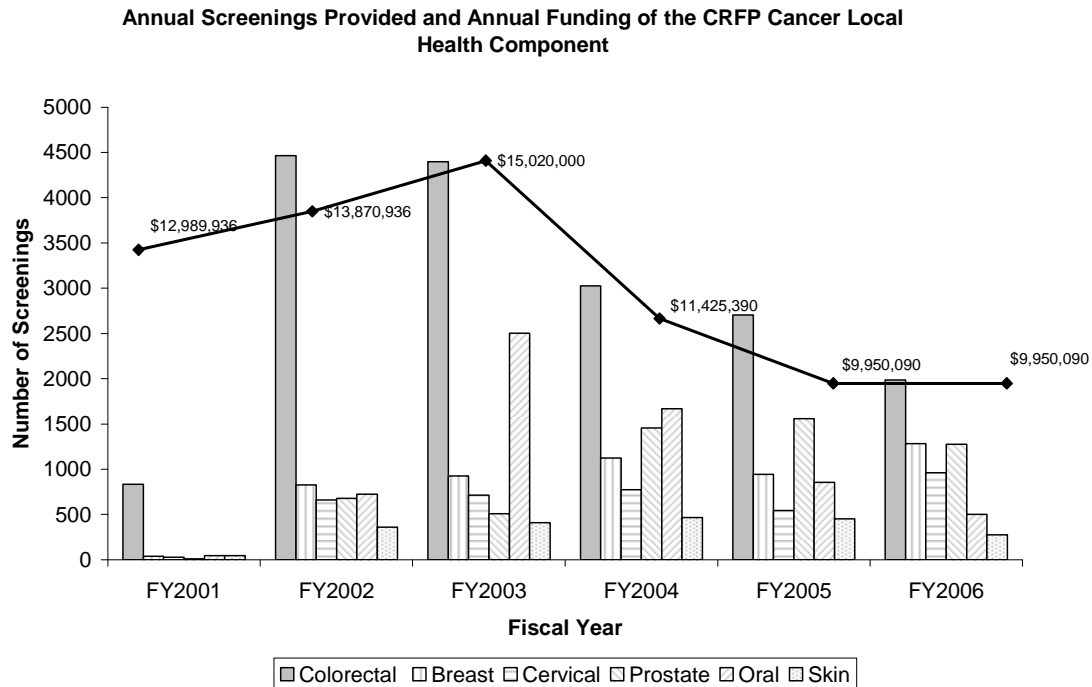
The main factor that contributes to the success of the local Cancer coalitions is having service providers on the coalition that can assist with planning and implementation efforts. The factors that hinder the success of the local Cancer coalitions include difficulty in finding times for coalition meetings that promote attendance, getting the members to take more of a leadership role in some of the Cancer program initiatives and trying to find ways to keep members interested and participating over time..

The suggested Cancer program coalition changes from the local perspective include more leadership among the coalition members, greater representation of community members (who are not receiving funding) on the coalitions, and greater minority representation. From the State CRFP Cancer staff perspective, local programs should try to utilize existing coalitions and to combine coalitions from other existing projects to the extent possible. Also, local programs could enforce accountability of the coalition members by outlining planned activities for their coalitions to accomplish.

Evaluation Question 4. What impact did funding levels for the Cancer local public health programs, and the statutory limitations have on program implementation and effectiveness?

Local Cancer program coordinators and Local Health Officers indicated that fluctuations in funding levels are a barrier to program performance in that they make it difficult to maintain project staff and provider networks. The Program funding levels have limited the number of screenings that local programs provide and the types of cancers for which screenings are provided, as well as the ability for programs to link individuals to treatment once cancers are identified through screening. Local programs report that they are unable to shift funding from screening to treatment, compounding this issue.

- The number of screenings provided each year appears to fluctuate with funding levels for the local public health component of the program.
- Currently, due to statutory limitations, the State cannot move funding that is not used by one jurisdiction to another jurisdiction that is in need or has a waiting list for screenings.



Sources: DHMH Cancer Screening Database, November 2006; DHMH Breast and Cervical Cancer Database, April 2006; DHMH prepared annual budgets

Evaluation Question 5. How well did the Statewide Academic Health Centers work?

Research Grants: CRFP awarded research grants to the Johns Hopkins University (JHU) and the University of Maryland (UM) to promote new investigations and support ongoing cancer research. JHU had success in gaining new grants and disseminating research, but due to budget cuts, had less success meeting their goals for funding new proposals using CRFP funds. UM met or exceeded its goals related to conducting clinical research activities each year, but did not meet its goal for increasing patient accrual into clinical trials in 2004. UM also met or exceeded most of its goals to expand its scope of clinical research and enhance research dissemination under their Other Tobacco-Related Diseases Research Grant.

Maryland Statewide Health Network: CRFP awarded a grant to UM to support the Maryland Statewide Health Network (MSHN). UM achieved its goal to have seven fully operational MSHN offices by FY2004, and by FY2006, had established 30 telemedicine linkages, exceeding its forecast estimate. The MSHN indicated a 31% increase in clinical trials participation among the general population and a 32% increase among participants from diverse populations. This indicates progress, although it is short of the goals UM had set for it. The MSHN established an objective to educate individuals in Baltimore City and counties on the Eastern Shore and Western Maryland about targeted cancers and other tobacco-related diseases. The number of activities promoted and conducted met or exceeded the goals for all years. Although upwards of 10,500 were educated in each year, the number of individuals reached fell slightly — a few hundred — short of the estimates in FY2003 and FY2004.

Cancer Local Public Health Grants: JHU focused on provision of prostate cancer education and screening services. They met or exceeded the State prostate cancer screening goals in FY2004 and FY2005. They also met or exceeded the State minority prostate cancer screening goals for FY2004 through FY2006. UM focused on provision of breast and cervical cancer education and screening services. They met or exceeded the State breast cancer screening goals (overall and minority) for

FY2003 through FY2005, as well as the State cervical cancer screening goal (overall and minority) that was set for FY2003.

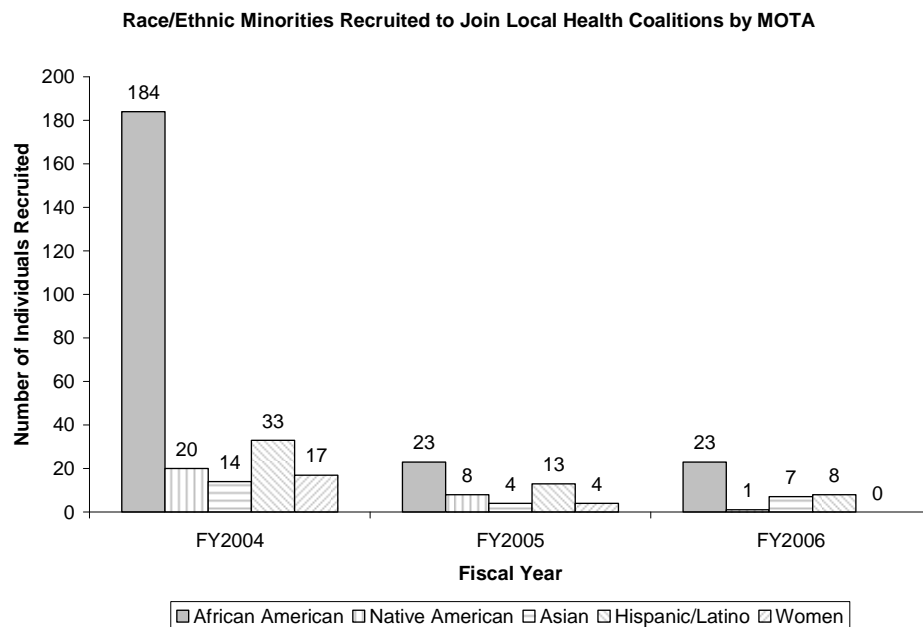
- Between FY2001 and FY2006, a total of 46,654 attendees were present at JHU's one-on-one or group education sessions focusing on prostate cancer.
- JHU provided a total of 4,611 prostate cancer screening tests between FY2001 and FY2006.
- Its focus on minorities is evident in that 93.9% of the prostate cancer screening tests were provided to minorities.
- Between FY2001 and FY2006, a total of 26,275 attendees were present at UM's one-on-one or group education sessions focusing on breast and cervical cancer.
- UM provided 5,541 breast cancer screenings (93.9% to minority individuals) and 2,210 cervical cancer screenings (91.7% to minority individuals) between FY2001 and FY2005.
- Although UM provided oral cancer screenings in FY2002 through FY2004, they discontinued provision of oral screenings as of FY2005.

MOTA Program

Evaluation Question 1. To what extent was minority outreach and participation achieved?

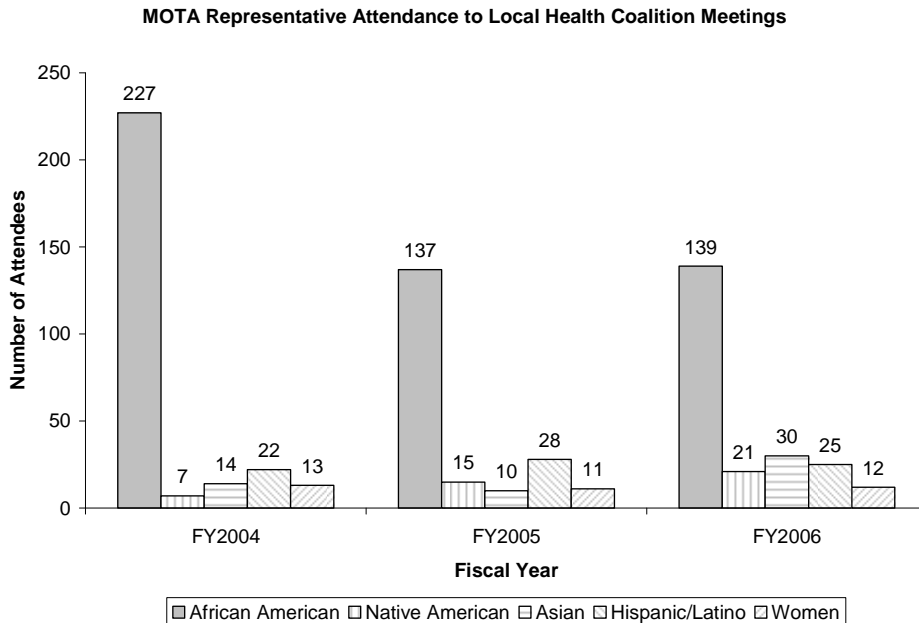
MOTA provides outreach and technical assistance to minority communities and promotes and organizes participation of racial/ethnic minorities on tobacco and cancer coalitions.

- In FY2004, MOTA recruited 268 individuals to expand minority representation on local health coalitions. They added 52 recruits in FY2005 and 39 recruits in FY2006.

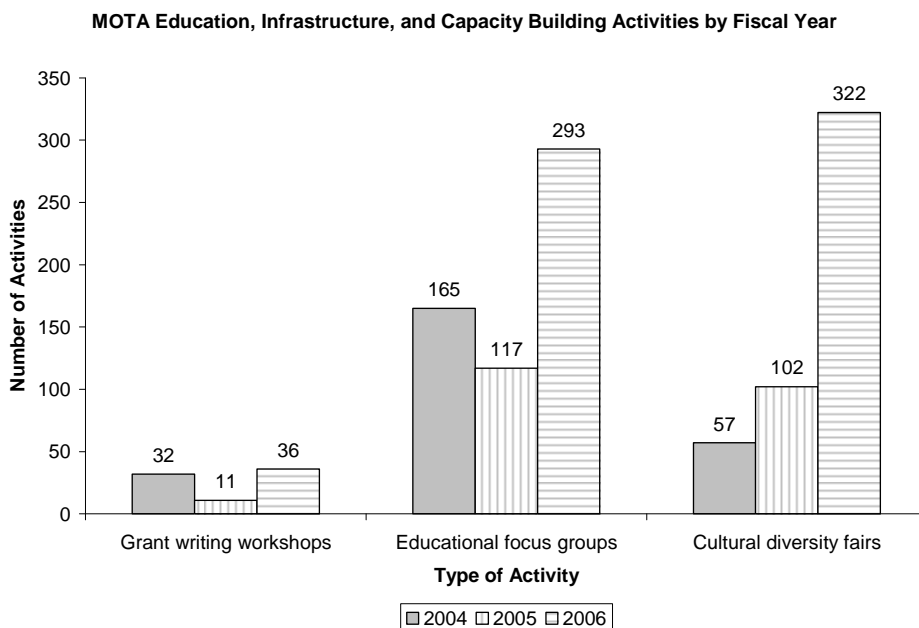


Source: DHMH MOTA Annual Statistical Performance and Project Reports

- Almost 300 minority representatives for MOTA attended local CRFP Tobacco and Cancer coalition meetings during FY2004 and over 200 representatives attended in both FY2005 and FY2006.

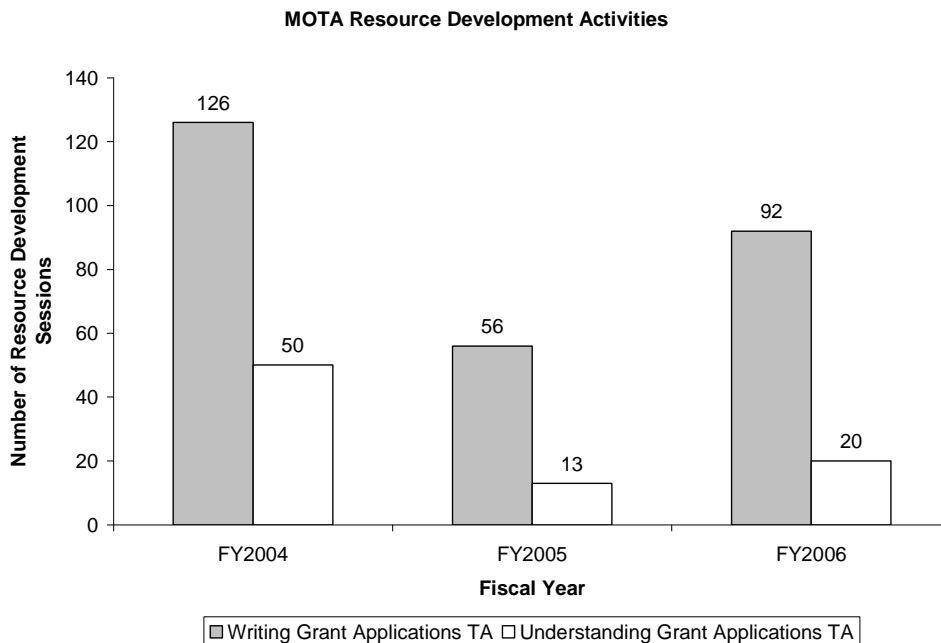


- To build infrastructure and capacity, the MOTA program provides educational focus groups, grant-writing workshops to minority organizations and individuals, as well as conducting and attending Cultural Diversity Fairs.
 - There were a total of 166,319 attendees at cultural diversity fairs put on by MOTA during FY2005 and FY2006



- MOTA provides training and technical assistance (TA) to minority and faith-based organizations and individuals to promote resource development. Through their efforts in providing TA on writing and

understanding grant applications, they assisted 69 organizations in receiving grant awards between FY2004 and FY2006. These activities may be driven by the availability of funding opportunities.



Source: DHMH MOTA Annual Statistical Performance and Project Reports

Overall Administration of the Program

Evaluation Question 1. How well did the administration of the program work?

The State Tobacco, Cancer and MOTA Program staff feel that the infrastructure for managing the Program is adequate. However, hiring and staff issues have been barriers to program management. The State aims to provide support, training, and technical assistance to the local Cancer, Tobacco, and MOTA programs, and believe that they are providing services that facilitate the planning and implementation of the local programs. However, the State Tobacco Program staff feel that they do not have adequate staffing to provide the level services that the local programs expect to receive.

- DHMH training, oversight, and program support are viewed as program facilitators by the local Cancer program coordinators.
 - Local Cancer program coordinators are satisfied with the assistance and guidance, and technical assistance and training provided by DHMH, as well as the availability and ability of DHMH staff to answer their questions.
 - Local Cancer program coordinators would like for the Cancer Education Database to be simplified so that it consumes less staff time.
 - Local Cancer program coordinators are satisfied with the clarity of instructions they receive for writing annual proposals and for documenting program activities.
- Regional Tobacco Program meetings were viewed as a program facilitator by local Tobacco program coordinators, and the level of guidance that programs receive from the State Tobacco Program staff is generally viewed as appropriate.

- Local Tobacco program coordinators would like to have more opportunities to network and interact with other local programs.
- Tobacco program coordinators are mixed with respect to satisfaction with the technical assistance provided by DHMH, the availability of DHMH staff to answer questions, the support from DHMH for program planning, and trainings provided.
- Tobacco program coordinators are mixed with respect to satisfaction with the clarity of instructions that they receive for writing annual proposals and for documenting program activities.
- MOTA grantees view the training and technical assistance they receive from DHMH, the availability of DHMH staff when needed and the ability of DHMH staff to answer questions, and the support that they receive from DHMH in program planning to be facilitators for program planning and implementation.
 - All MOTA grantees indicated that they have received some form of training or technical assistance from DHMH, but some would like more guidance on building and sustaining relationships with community organizations.
 - MOTA grantees are satisfied with the clarity of instructions that they receive for writing annual proposals and reporting program activities.

Chapter 1: Introduction

1.1. Introduction

The State of Maryland's Department of Health and Mental Hygiene (DHMH) commissioned a Comprehensive Evaluation of the Cigarette Restitution Fund Program (CRFP). The evaluation covers both of the CRFP's overarching programs — the Tobacco Use Prevention and Cessation Program (Tobacco Program) and the Cancer Prevention, Education, Screening, and Treatment Program (Cancer Program), in addition to the Minority Outreach and Technical Assistance program (MOTA). This report details the findings of the Comprehensive Evaluation and is intended to provide details regarding what has been accomplished since the CRFP began.

This report is organized around 8 chapters:

- The remainder of Chapter 1 sets the context for the evaluation through a brief review of the CRFP's history
- Chapter 2 presents the design and methodology for the evaluation of the CRFP
- Chapter 3 provides an assessment of the CRFP's Tobacco Program
- Chapter 4 provides an assessment of the CRFP's Cancer Program
- Chapter 5 provides an assessment of the CRFP's MOTA Program
- Chapter 6 provides an assessment of the overall program administration
- Chapter 7 provides a discussion of limitations for the evaluation
- Chapter 8 provides recommendations and future directions.

1.2. CRFP History and Context

1.2.1. Program Background and Overview

In 1996, the Attorney General of Maryland instituted a lawsuit against the tobacco industry in Maryland courts. Suits also were being filed in other States. These actions ultimately led to the multi-state Master Settlement Agreement (MSA) with the tobacco industry, which was signed in November 1998. Following this settlement, the Maryland General Assembly established the Cigarette Restitution Fund (CRF) in its 1999 Session. This law mandated that at least 50% of the annual MSA appropriation be expended on health and tobacco-related priorities. As a result, over \$1 billion of the continuing, non-lapsing fund was dedicated to such priorities. The MSA continues in perpetuity.

In April 2000, the Maryland legislature enacted Health—General Article, Title 13, Subtitles 10 and 11, Annotated Code of Maryland (the CRFP Law) creating the Cigarette Restitution Fund Program (CRFP). The establishment of the CRFP became effective on July 1, 2000. The Tobacco and Cancer Programs created under the CRFP were established to provide a lasting legacy of comprehensive public health initiatives that benefit the health and welfare of Maryland's residents by reducing tobacco use and the mortality and morbidity rates for cancer and other tobacco-related diseases. The MOTA Program was also established to provide start-up technical assistance to African American and other identified minority communities, ensuring their effective participation in the Program.

The CRFP also includes funding for an administrative structure. The Tobacco, Cancer, and MOTA programs are managed under this structure. The Tobacco and Cancer Programs each consist of five components, four of which are common in intent and function. These are:

1. Surveillance and evaluation
2. Local public health
3. Statewide public health
4. Administration

The fifth component for the Tobacco Program is a statewide counter-marketing program implemented under a competitively awarded contract. It is a coordinated multimedia program that incorporates campaigns that employ proven approaches that are culturally, gender and age appropriate.

For the Cancer Program, the fifth component is the Statewide Academic Health Center Program (SAHC) through which major research and public health activities are implemented. Two have been established; the University of Maryland Medical Group (UM) and the Johns Hopkins Medical Institutions (JHU).

The CRFP law laid out specific components and requirements for the Tobacco and Cancer Programs. As a part of this, it:

1. Mandates baseline and subsequent annual studies (changed to biennial in 2004) so that empirical data on the burden of death and disease in local populations can be monitored in each jurisdiction;
2. Requires that this information be used to determine the amounts of money awarded to each jurisdiction and sets the formulae by which funding amounts to local jurisdictions are computed;
3. Mandates that local health officers (LHOs) establish local community health coalitions to advise LHOs on comprehensive plans for tobacco and cancer, as well as their implementation and evaluation;
4. Specifies groups that must be represented on these coalitions (and advises on additional members);
5. Requires that LHOs develop, implement, and evaluate comprehensive tobacco and cancer plans;
6. Requires the two SAHCs to collaborate with the Baltimore City Health Department to develop, implement, and evaluate a comprehensive cancer plan for the city and to engage in capacity building with a local community hospital in Baltimore City;¹
7. Requires the development of an agreement among the SAHCs, the DHMH, the Maryland Department of Business and Economic Development and the Maryland Technology Development Corporation that expedites the translation of research on tobacco and cancer-related diseases;
8. Establishes the scope of the State's ownership or financial interest in the commercialization of the products and results flowing from the tobacco and cancer-related research grants to the Statewide Academic Health Centers;

¹ The CRFP law delineates the criteria for selection of the community hospitals.

9. Specifies the conditions under which Requests for Proposals (RFPs) can be issued to solicit institutions of higher education or other entities to perform studies or provide certain other services as permitted or mandated under the CRFP law;
10. Limits annual administrative costs to 7% of total direct costs for all CRFP-supported programs implemented by local health departments or by other entities; and
11. Limits annual administrative costs incurred by DHMH to 7% of total direct program costs.

1.2.2. Initial Program Implementation

The CRFP began operations on July 1, 2000. DHMH oversees the program's dispersal of MSA funds to the following organizations responsible for the CRF program:

1. Local health departments, the implementers of the local public health component under both the Cancer and Tobacco Programs;
2. Maryland's two SAHCs to conduct research and public health activities under the Cancer program;
3. Baseline and annual tobacco and cancer studies;
4. Successful offerors to implement the Tobacco Program's statewide countermarketing campaign;
5. Successful offerors under CRFP's MOTA component to provide culturally competent outreach and technical assistance to the targeted minority communities to enable their effective participation in CRF programs; and
6. Other vendors and resources to perform services required to implement the program successfully.

1.2.2.1. Obstacles and Barriers

The CRFP legislation, which became effective on July 1, 2000, was signed into law less than three months prior. The DHMH had little lead-time in which to put in place the administrative infrastructure required to implement the CRFP. In addition, the CRFP legislation required the Tobacco and Cancer Programs to conduct special studies and submit reports to the counties describing the extent of the problems of tobacco use and cancer. Concurrently, local health departments were mandated to complete an inventory of all publicly-funded cancer control programs and tobacco use cessation and prevention programs already operating so that the CRFP's provision that CRFP funding not supplant pre-existing funding for such programs could be met.

The Tobacco Program solicited proposals and awarded an evaluation contract in the summer of 2000. The contractor completed a complex statewide data collection and analysis process and provided a report to the State: *"Initial Findings from the Baseline Tobacco Study"* by February 2001. The Cancer Program utilized data from the Maryland Cancer Registry, the Vital Statistics Administration, and other sources to complete a *"Baseline Cancer Report"* by August 2000. Both programs set formal goals and objectives and developed guidelines for local applications based on these findings.

Achieving full implementation of CRFP within its initial year (FY 2001) was challenging. Implementation was staged over a period of more than 9 months. CRFP administration had to be functionally defined, structured and integrated into the DHMH organizational structure as an operating unit. This involved resolving issues pertaining to staffing, other personnel matters, procurement, internal organizational communication, and reporting and decision-making. The provisions of the enabling law had to be translated into program guidance in order to make funding awards to local health departments and other eligible recipients.

Procurements for the Tobacco Baseline Study and for the Statewide Counter-Marketing Campaign had to be developed, issued and awarded.

Unlike the local public health components and the surveillance and evaluation components, the law provided no explanation of what constituted "outreach and start-up technical assistance to African American communities." In its administration of the CRFP, DHMH elected to interpret the General Assembly intent for this component as encompassing "African American and other minorities." The CRFP also decided to create a framework for the MOTA component that was based on scientific principles, electing to base the guidance for this component on previous work of this nature as synthesized by the CDC.

The central CRFP administration and the Cancer and Tobacco directorates had discretion to determine how to make certain things happen within the parameters set by the law; for example, MOTA, media and counter-marketing, and baseline/annual studies. Local health organizations had the discretion to establish the mandated community health coalitions in a manner that best fit their needs and organizational cultures as long as they did so within the parameters set forth in the law. Assuring that implementation unfolded according to the provisions of the law consumed major attention as this complex program was put in place.

In the initial year, the CRFP legislation permitted DHMH to award no more than \$10,000 to a local health department under each of the Cancer and Tobacco Programs prior to completion of a baseline study and submission of a comprehensive plan for the local program. No local health department could receive additional funds under either program until DHMH approved its comprehensive plan.

1.2.2.2. Successes and Accomplishments

Local health departments formed community health coalitions, developed comprehensive Cancer and Tobacco plans using the reports and the guidelines provided by the State, and obtained input from their coalitions in this process. The State reviewed and approved the plans prior to releasing funds to local health departments to begin program operations. This process assured community participation and data based decision-making in order to derive effective interventions tailored to each local community. Because high quality plans were the requisite outcome, an extended implementation period was the result.

Results-based performance indicators were developed and promulgated for each component of CRFP. The central CRFP office began issuing RFPs and negotiating Memoranda of Understanding to obtain the other services required under the law, such as MOTA. Local health departments issued RFPs to acquire selected community-based tobacco prevention and cessation services. They also negotiated contracts with medical providers for cancer screening, diagnostic and treatment services.

The Cancer Program funds were awarded between September of 2000 and May of 2001. Tobacco Program funds were awarded between March and May of 2001. Funds to the MOTA Program were awarded in February of 2001. The cumulative effect overall was that the CRFP, in its entirety, was not fully implemented during the first fiscal year (2001), but was able to reach full implementation by January 2002 when the Media Counter-Marketing contract was signed. Eighty percent (80%) of CRFP funds were spent the first year of implementation (FY 2001), 91% in FY 02, 96% in FY 03, and 97% in FY 04.

An RFP was released by DHMH in 2001 for vendors interested in conducting the counter-marketing and media component of the CRFP. The contract was awarded in 2002 with the purpose of coordinating a statewide countermarketing and media campaign to counter tobacco advertisements and discourage the use of tobacco products. The campaign's specific objectives were taken from the CDC's "Best Practices" and included, but were not limited to:

- Countering pro-tobacco influences throughout the State and increasing anti-tobacco messages and influences, including efforts directed at specific minority population groups;

- Raising individual and community awareness of the need to reduce the availability of tobacco products to youth;
- Raising individual and community awareness of the need to eliminate involuntary exposure to secondhand smoke;
- Supporting tobacco users in their efforts to quit and stay quit.

For the Cancer Program, grants have been awarded to the UM and JHU through the Statewide Academic Health Centers program. Funding of these grants began in FY2001. Each year:

- UM and JHU have each received SAHC Research Grants that promote research on cancer-related topics and facilitate translating research into practice;
- UM has received an Other Tobacco-Related Diseases Grant that is focused on research into other tobacco-related diseases (e.g., stroke, peripheral vascular disease, cardiovascular disease, infant mortality due to low birth weight, and chronic pulmonary disease.);
- UM also has received a Maryland Statewide Health Network Grant (MSHN) that promotes telemedicine to improve access to healthcare across the State, and supports the promotion of cancer and tobacco-related disease prevention and control activities for local residents and local health care professionals; and
- UM and JHU have each received a Local Public Health Cancer Grant that support cancer prevention, education, screening, and treatment in Baltimore City.

1.2.3. Current Context

The CRFP has been implemented in consultation with the Maryland General Assembly and in cooperation with the Maryland Department of Legislative Services as mandated in the law. CRFP provides annual status reports and briefings to the Governor and to the General Assembly.

The CRFP law mandated a comprehensive evaluation of the program and submission of a report based on that evaluation to the Maryland General Assembly no later than November 1, 2004. This evaluation was to produce a report to the General Assembly of CRFP's effectiveness, including its achievement of goals, objectives and benchmarks of its administration. The evaluation report was delayed due to the cost containment measure in the 2002 legislative session. Subsequently, DHMH reissued an RFP for the program evaluation through competitive bidding and awarded the contract in January 2006.

Chapter 2: Evaluation Design

2.1. CRFP Goals and Objectives

The Maryland Health Improvement Plan 2000–2010 identified nine overall objectives related to tobacco for programs receiving funds from the CRFP. They are to:

1. Reduce tobacco use among Maryland adults by 50% from the 2000 base rate;
2. Reduce tobacco use among Maryland school-age youth by 50% from the 2000 base rate;
3. Reduce the proportion of women who use tobacco products during pregnancy by 50% from the 2000 base rate;
4. Increase the proportion of women who quit smoking because of pregnancy by 50% from the 2000 base rate;
5. Have all health plans in Maryland include smoking cessation as a covered service;
6. Have at least 90% of primary care providers provide smoking cessation advice and support to their patients who use tobacco products;
7. Have tobacco retailers achieve a 99% compliance rate with Maryland's laws prohibiting the sale of tobacco products to minors;
8. Decrease the number of children who are exposed to secondhand smoke by 75% from the 2000 base rate; and
9. Have locally developed tobacco use prevention and cessation coalitions operating in every Maryland county and the City of Baltimore.

In addition, there were seven cancer-related objectives goals. Similar to the tobacco-related goals, the cancer-specific goals seek to reduce cancer burden by 2010. They are to:

1. Reduce overall cancer mortality to a rate of no more than 174.6 per 100,000 persons;
2. Reduce disparities in overall cancer mortality between minorities and Whites to a rate of no more than 1.00;
3. Reduce colorectal cancer mortality to a rate of no more than 17.5 per 100,000 persons in Maryland;
4. Reduce breast cancer mortality to a rate of no more than 21.5 per 100,000 persons in Maryland;
5. Reduce prostate cancer mortality to a rate of no more than 20.4 per 100,000 persons in Maryland;
6. Provide treatment of linkages to treatment for uninsured persons screened for cancer under the Cancer Prevention, Education, Screening, and Treatment (CPEST) program; and
7. Increase the number of diverse individuals participating in clinical trials through UM's Greenebaum Cancer Center by 17% by FY2006.

These 16 goals represent the long-term goals of the CRFP. This Comprehensive Evaluation cannot assess long-term outcomes. Nevertheless, to the extent that intermediate steps toward these goals can be assessed, the Comprehensive Evaluation examines them.

2.2. Evaluation Questions

The Comprehensive Evaluation of the CRFP's Tobacco, Cancer and MOTA Programs is designed to provide an examination of what has been accomplished and what processes have taken place since the programs began. Six overarching questions are addressed in the Comprehensive Evaluation:

1. To what extent were the tobacco and cancer goals met?
2. To what extent was minority outreach and participation achieved?
3. How well did the local community health coalitions work?
4. What impact did funding levels for the cancer and tobacco local public health programs, and the statutory limitations on shifting funding among components have on program implementation and effectiveness?
5. How well did the Statewide Academic Health Centers work?
6. How well did the administration of the program work (State and local)?

2.3. Evaluation Approach

Within each of the six overarching questions, there are sub-questions that represent both process and outcome focused evaluations. Table 2-1 lists the questions that are addressed in this Comprehensive Evaluation and identifies whether each question is associated with a process evaluation or an outcome evaluation or both. It also identifies where the questions are located in this report.

Table 2-1. Comprehensive Evaluation Questions

Number	Question	Evaluation Goal	Report Location
1.0 To what extent were the tobacco goals met?			
1.1	To what extent were the Tobacco Managing for Results (MFR) reports ² (benchmarks) and short- and long-term goals met?	Outcome	Chapter 3, Section 3.1.1
1.2	To what extent did the components in the Tobacco Program support the control of smoking in Maryland?	Process and Outcome	Chapter 3, Section 3.1.2
1.3	To what extent did the Tobacco Program implement the CDC's "Best Practices" model for tobacco use prevention and cessation? How the program was set up (plans)	Process	Chapter 3, Section 3.1.3
1.4	To what extent was cigarette smoking among Maryland youth and adults reduced in comparison with other States' tobacco use cessation programs and with the Nation as a whole?	Outcome	Chapter 3, Section 3.1.4
1.5	Is there evidence of program participation by targeted populations (youth, adults, minorities) under the Tobacco Program?	Process	Chapter 3, Section 3.1.5

² MFR Reports were implemented by the State government to support a customer-oriented focus. Prepared by DHMH as part of the operating budget and updated annually, these reports include goals and objectives identified by each program. These MFR plans are used for strategic planning decisions.

Number	Question	Evaluation Goal	Report Location
1.7	To what extent were local tobacco CRFP plans reflective of community needs and priorities identified by data?	Process	Chapter 3, Section 1.6
1.8	To what extent did local health tobacco plans remain consistent with the CDC's "Best Practices" models? How the program has evolved (actual)	Process	Chapter 3, Section 3.1.7
1.9	What State and local policy measures were adopted that helped or hindered the Tobacco Program's efforts to achieve its goals?	Process	Chapter 3, Section 3.1.8
1.10	How well did the surveillance and evaluation activities work in the Tobacco Program?	Process	Chapter 3, Section 3.1.9
1.11	What factors helped or hindered the implementation of the Tobacco Program?	Process	Chapter 3, Section 3.1.10
1.12	What changes, if any, should be made in the Tobacco Program?	Process	Chapter 3, Section 3.1.11
2.0 To what extent was minority outreach and participation achieved?			
2.2	To what extent were racial and ethnic minorities served through the local Tobacco Programs?	Process	Chapter 3, Section 3.2.1
2.3	What factors contributed to, or hindered, minority outreach and participation in the CRFP Tobacco Program?	Process	Chapter 3, Section 3.2.2
2.4	What changes, if any, should be made regarding minority outreach and participation in the CRFP Tobacco Program?	Process	Chapter 3, Section 3.2.3
3.0 How well did the local community health coalitions work?			
3.1	To what extent did the local health coalitions reflect the diversity of each jurisdiction?	Process	Chapter 3, Section 3.3.1
3.2	What was the extent of the active participation by community organizations on the local tobacco and cancer coalitions?	Process	Chapter 3, Section 3.3.2
3.3	To what extent did the local health coalitions participate in the development of tobacco control efforts?	Process	Chapter 3, Section 3.3.3
3.4	What factors contributed to, or hindered, the effectiveness of the local Tobacco health coalitions?	Process	Chapter 3, Section 3.3.4
3.5	What changes, if any, should be made regarding the local Tobacco health coalitions?	Process	Chapter 3, Section 3.3.5
4.0 What impact did funding levels for the tobacco local public health programs, and the statutory limitations on shifting funding among components have on program implementation and effectiveness?			
4.1	To what extent was Tobacco Program funding levels adequate for the jurisdiction to implement the Centers for Disease Prevention and Control's "Best Practices" model?	Process	Chapter 3, Section 3.4.1
4.4	To what extent did funding levels support necessary infrastructure for local Tobacco programs?	Process	Chapter 3, Section 3.4.2
4.5	What changes, if any, should be made with regard to the funding levels and statutory requirements for tobacco?	Process	Chapter 3, Section 3.4.3
1.0 To what extent were the cancer goals met?			
1.1	To what extent were the Cancer Managing for Results (MFR) reports (benchmarks) and short- and long-term goals met?	Outcome	Chapter 4, Section 4.1.1
1.6	What evidence can be found of program impact on prevention, education, and screening of the targeted cancers (i.e., colon and rectum, breast, cervical, prostate, oral, skin cancers) under the Cancer program?	Outcome	Chapter 4, Section 4.1.2
1.7	To what extent were local cancer CRFP plans reflective of community needs and priorities identified by data?	Process	Chapter 4, Section 4.1.3
1.10	How well did the surveillance and evaluation activities work in the Cancer Programs?	Process	Chapter 4, Section 4.1.4
1.11	What factors helped or hindered the implementation of the	Process	Chapter 4,

Number	Question	Evaluation Goal	Report Location
	Cancer Programs?		Section 4.1.5
1.12	What changes, if any, should be made in the Cancer Programs?	Process	Chapter 4, Section 4.1.6
2.0 To what extent was minority outreach and participation achieved?			
2.2	To what extent were racial and ethnic minorities served through the local Cancer Programs?	Process	Chapter 4, Section 4.2.1
2.3	What factors contributed to, or hindered, minority outreach and participation in the CRFP Cancer Programs?	Process	Chapter 4, Section 4.2.2
2.4	What changes, if any, should be made regarding minority outreach and participation in the CRFP Cancer Programs?	Process	Chapter 4, Section 4.2.3
3.0 How well did the local community health coalitions work?			
3.1	To what extent did the local health coalitions reflect the diversity of each jurisdiction?	Process	Chapter 4, Section 4.3.1
3.2	What was the extent of the active participation by community organizations on the local tobacco and cancer coalitions?	Process	Chapter 4, Section 4.3.2
3.3	To what extent did the local health coalitions participate in the development of cancer control efforts?	Process	Chapter 4, Section 4.3.3
3.4	What factors contributed to, or hindered, the effectiveness of the local health coalitions?	Process	Chapter 4, Section 4.3.4
3.5	What changes, if any, should be made regarding the local community health coalitions?	Process	Chapter 4, Section 4.3.5
4.0 What impact did funding levels for the cancer local public health programs, and the statutory limitations on shifting funding among components have on program implementation and effectiveness?			
4.2	To what extent were Cancer Program funding levels adequate for the local jurisdictions to implement the cancer prevention, education, screening and treatment program?	Process	Chapter 4, Section 4.4.1
4.3	To what extent were the funding levels for the Statewide Academic Health Centers adequate for implementation of the cancer research, other tobacco-related disease research, and statewide health network?	Process	Chapter 4, Section 4.4.2
4.4	To what extent did funding levels support necessary infrastructure for local Cancer programs?	Process	Chapter 4, Section 4.4.3
4.5	What changes, if any, should be made with regard to the funding levels and statutory requirements for cancer?	Process	Chapter 4, Section 4.4.4
5.0 How well did the Statewide Academic Health Centers work?			
5.1	To what extent were the MFR reports (goals and objectives) for cancer research grants achieved?	Outcome	Chapter 4, Section 4.5.1
5.2	To what extent were the MFR reports (goals and objectives) for the tobacco-related diseases grant achieved?	Outcome	Chapter 4, Section 4.5.2
5.3	To what extent were the MFR reports (goals and objectives) for the Maryland Statewide Health Network?	Outcome	Chapter 4, Section 4.5.3
5.4	To what extent were the goals and objectives of the cancer local public health grants achieved?	Outcome	Chapter 4, Section 4.5.4
5.5	What factors helped or hindered the implementation of the cancer research grants, tobacco-related diseases grant, statewide health network grant, and the local public health cancer grants in Baltimore City?	Process	Chapter 4, Section 4.5.5
5.6	What changes, if any, should be made regarding the Statewide Academic Health Centers component of the Cancer program?	Process	Chapter 4, Section 4.5.6
2.0 To what extent was minority outreach and participation achieved?			
2.1	To what extent were the performance measures for minority outreach and participation achieved in the MOTA component of the CRFP?	Process and Outcome	Chapter 5, Section 5.1.1

Number	Question	Evaluation Goal	Report Location
2.3	What factors contributed to, or hindered, minority outreach and participation in the CRFP Cancer and Tobacco programs?	Process	Chapter 5 Section 5.1.2
2.4	What changes, if any, should be made regarding minority outreach and participation in the CRFP Cancer and Tobacco programs?	Process	Chapter 5 Section 5.1.3
6.0 How well did the administration of the program work?			
6.1	To what extent was an infrastructure for the management of the program adequate?	Process	Chapter 6, Section 6.1.1
6.2	To what extent did the Department provide oversight, training, and technical assistance of the local Tobacco and Cancer Programs? Where the statutory requirements met?	Process	Chapter 6, Section 6.1.2
6.3	What impact did the administrative cost limitations have on program implementation?	Process	Chapter 6, Section 6.1.3
6.4	What factors helped or hindered the administration of the program?	Process	Chapter 6, Section 6.1.4
6.5	What changes, if any, should be made in the administration of the program?	Process	Chapter 6, Section 6.1.5

2.4. Data Sources and Data Collection Methods

The data used in this Comprehensive Evaluation came from archival data collected and stored by DHMH, extant data from multiple sources, and primary data collected through surveys, in-depth interviews, and coalition observations. Survey data were collected from Tobacco program coordinators, Cancer program coordinators, MOTA grantees, and coalition members. Interviews were conducted with local health officers from each jurisdiction, Tobacco program coordinators, Cancer program coordinators, MOTA grantees, SAHC key staff, and DHMH CRFP key staff. Coalition observations of Tobacco meetings took place in four jurisdictions: Baltimore City, Howard County, Montgomery County, and St. Mary's County. Coalition observations of Cancer meetings took place in four jurisdictions: Allegany County, Baltimore City, Frederick County, and St. Mary's County. Coalition observations of combined meetings took place in two jurisdictions: Charles County and Somerset County.

Table 2-2 provides information about the data sources that were used, the measures that were derived from those data sources, and the questions that were addressed through analysis of data from each source. The question numbers shown refer to the questions listed in the above in Table 2-1. The information in italics represents data related to cancer programs.

Table 2-2. Data Sources and Associated Measures

Data Source	Measures	Questions Addressed
<i>MFR reports for cancer</i>	<i>Cancer benchmarks and goals</i>	<i>1.1, 4.1, 4.2, 4.3</i>
MFR reports for tobacco	Tobacco benchmarks and goals	1.1
Baseline and follow-up dataset and reports from the Maryland Adult Tobacco Survey (MATS) and Maryland Youth Tobacco Survey (MYTS)	Tobacco use prevalence, attitudes, and beliefs Changes in prevalence, attitudes, and beliefs from baseline to follow-up Quit rate data	1.1, 1.5, 1.7, 1.10
Local tobacco plans	Budget and resource allocations Planned activities in the State and by jurisdiction Staffing resources and allocations Target audience and participants	1.2, 1.5, 1.7, 1.8, 3.1, 4.2
Quarterly and annual tobacco	Budget and resource allocations	1.2, 1.5,

Data Source	Measures	Questions Addressed
reports	Frequency and types of activities in the State and by jurisdiction Staffing resources and allocations Audience and participant reach	1.7, 2.2, 4.2
Local public health databases	Incidence and prevalence information	1.2, 2.2
Best Practices for Comprehensive State Tobacco Control programs	Best practices	1.3
Maryland Cancer Plan	Budget and resource allocations Planned activities in the State and by jurisdiction Staffing resources and allocations Target audience and participants	1.4
Educational database	Number of people educated about screening by jurisdiction and type of cancer Methods for education used Number in attendance: overall, minority, gender, other demographic Materials distributed (number and type) Number offered and signed up for screening	1.6, 1.10, 2.2, 4.4
Breast and cervical cancer screening software	Number of people screened by jurisdiction Number of minorities screened by jurisdiction Number of screening types Number of abnormal screenings Number of cancer screenings	1.6, 1.10, 2.2
Reports from local cancer programs	Number and type of program activities Number and type of information distributed Number screened for each target cancer Number and type of cancer diagnoses Number of minorities screened for target cancers	1.6
Local cancer progress reports Cancer research program progress reports	Program activities Number screened for each target cancer Number and type of cancer diagnoses Number of minorities screened for target cancers	2.2, 3.1, 3.2, 4.1, 4.3
Data from the Maryland Behavior Risk Factor Surveillance System (MBRFSS)	Number of mammograms, Pap smear tests, oral health, prostate cancer screening, and colorectal cancer screening by demographics (age, SES)	1.6
Maryland Cancer Annual Report	New cases of targeted cancers by year, jurisdiction, minority, and gender Mortality rates from targeted cancers by year and jurisdiction, jurisdiction, minority, and gender CRFP annual cancer reporting requirements	1.6, 1.7, 1.10, 5.1
Maryland Cancer Survey Reports	Knowledge and behaviors related to cancer prevention and screening	1.6
Maryland Health Care Commission data	Prevalence and incidence of cancers	1.6, 1.10
Local cancer grant applications Cancer research grant applications	Budget and resource allocations Planned activities in the State and by jurisdiction Staffing resources and allocations Target audience and participants	1.7, 3.1, 3.2, 4.1, 4.3
Local and Statewide tobacco legislation	Number of policies adopted Statewide	1.9

Data Source	Measures	Questions Addressed
County-level tobacco control reports	Number of policies adopted by county	1.9
Site visit reports for 25 local cancer programs, 2001–2005	Type of information being shared between grantees and DHMH	1.10
Cancer client database reports	Number of screenings for target cancers by jurisdiction, gender, ethnicity Number of cancer diagnoses of target cancers by jurisdiction, gender, ethnicity	1.10, 2.2, 4.4
Local tobacco control plans for FYs 2001–2005	Goals for the Tobacco Program	1.10
Minutes of local public health coalition meetings	Use of evaluation information in meetings	1.10
MOTA grantees progress	Number of technical assistance, outreach, and training events Number of racial and ethnic minorities in attendance at MOTA activities Number and type of materials distributed	2.1
Statistical and annual reports for MOTA	Number of MOTA activities Number of performance targets achieved Capacity building among racial and ethnic minorities Program participation among racial and ethnic minorities	2.1
Minutes of local cancer coalition meetings	Sectors represented in meeting topics	3.1
Tobacco coalition attendance sheets and minutes	Sectors represented by attendees Community participation	3.2
“Conquest” newsletter	Research information disseminated by JHU	4.1
Annual Baltimore City grant applications	Budget and resource allocations Planned activities in the State and by jurisdiction Staffing resources and allocations Target audience and participants	4.4
Tri-annual Baltimore City progress reports	Program activities Number screened for each target cancer Number and type of cancer diagnoses Number of minorities screened for target cancers	4.4
Annual legislative report to the Maryland General Assembly	Goals and expectations set for upcoming years	5.1
Health officer memos for cancer program implementation	Type of information being shared with grantees Types of assistance documents being shared with grantees	5.1
Monthly teleconference agenda/notes	Type of information being shared with grantees	5.1
Grant application instructions and review criteria	Qualitative review—clarity and precision of instructions	5.1
Site visit procedures and reports	Information being shared during site visits Recommendations being made Assistance being offered to grantees	5.1
Trainings	Types of trainings being offered to grantees	5.1
Tobacco Program records	Information being provided to tobacco grantees incorporated into programs	5.1
Tobacco coordinator surveys	Program description, program planning information, program implementation information	1.2, 1.5, 1.7, 1.9, 1.11, 2.3,

Data Source	Measures	Questions Addressed
		2.4, 3.2, 4.4, 6.2
Tobacco coordinator interviews	Program description, program planning information, program implementation information	1.2, 1.5, 1.9, 1.10, 1.11, 1.12, 2.3, 2.4, 3.1, 3.2, 3.3, 3.5, 4.1, 6.2, 6.5
Cancer coordinator surveys	Program description, program planning information, program implementation information	1.7, 1.11, 2.3, 3.2, 3.3, 4.2, 6.2
Cancer coordinator interviews	Program description, program planning information, program implementation information	1.6, 1.11, 1.12, 2.3, 2.4, 3.2, 3.3, 3.5, 4.0, 4.2, 6.2, 6.5
Local Health Officer Interviews	Program description, program planning and implementation	1.2, 1.5, 1.9, 1.11, 1.12, 2.4, 3.5, 4.0, 4.1
Statewide Academic Health Centers key staff interviews	Program planning and implementation information	4.3, 5.5, 5.6, 6.5
MOTA grantee surveys	Program description, program planning information, program implementation information	5.1.2, 5.1.3, 6.2
MOTA grantee interviews	Program description, program planning information, program implementation information	5.1.2, 5.1.3, 6.2
DHMH key staff interviews	Program planning and implementation information	1.11, 1.12, 2.3, 2.4, 3.3, 3.4, 4.0, 6.1, 6.4, 6.5

2.4.1. Tobacco Outcomes Data

Changes in initiation, prevalence of use, and progress toward reducing the tolerance and promotion of tobacco use, as measured by changes from 2000, 2002, and 2006 in relevant MATS and MYTS items, were included in this evaluation. Additionally tobacco use prevalence data from the Behavioral Risk Factor Surveillance System (BRFSS) was examined for comparisons between Maryland and other States.

Data from the Maryland Comptroller's office reporting monthly sales of "20 pack equivalents" at the wholesaler/subwholesaler level are included to examine impact of a Maryland cigarette tax increase effective June 1, 2002. Although the data are not retail sales data that are more proximally indicative of consumption, they can be used to indicate apparent consumption. The cigarette tax increase represents a potentially major concurrent influence on the prevalence and use outcomes presumably impacted by the Tobacco Program.

2.4.2. Coordinator, Grantee and Coalition Members Survey Methodology

Surveys for collecting data from Tobacco program coordinators, Cancer program coordinators, MOTA program grantees, and local health coalition members were created with input from DHMH staff. The surveys were designed to gain information regarding specific evaluation questions. The surveys were programmed on the Internet, and invitations for participation were sent to the respondents.

Results from the surveys are presented throughout the report, and the survey instruments and Tables containing the survey results are presented in Appendix A.

2.4.2.1. Survey Participants

The Tobacco and Cancer program coordinator surveys and the MOTA grantee surveys were available for completion online from September 5, 2006 through September 29, 2006. An initial invitation and two reminder invitations were sent to each participant. During that period, 23 of the 24 Tobacco program coordinators, 24 of the 26 Cancer program coordinators, and 13 of the 15 MOTA program grantees completed the surveys.

The coalition members' survey was available for completion online from October 10, 2006 through December 15, 2006. Coordinators from 12 jurisdictions requested hard copies surveys for their coalition members to complete. A total of 293 individuals completed the survey through the Website and 60 individuals completed the survey in hard copy format. Table 2-3 summarizes the coalition representation among survey participants and the survey response rate by jurisdiction. More detailed demographic information can be found in Table A-1 in Appendix A.

Table 2-3. Coalition Members' Survey Respondents by Jurisdiction, Program Representation, and Response Rate

Jurisdiction	Tobacco			Cancer		
	FY2006 Members	Survey N	Survey Representation	FY2006 Members	Survey N	Survey Representation
Allegany County	47	21	44.68%	26	10	38.46%
Anne Arundel County	19	5	26.32%	18	8	44.44%
Baltimore City	111	12	10.81%	163	6	3.68%
Baltimore County	60	32	53.33%	29	18	62.07%
Calvert County	35	0	0.00%	19	2	10.53%
Caroline County	28	12	42.86%	27	8	29.63%
Carroll County	35	4	11.43%	21	3	14.29%
Cecil County	17	10	58.82%	38	9	23.68%
Charles County	68	15	22.06%	68	14	20.59%
Dorchester County	38	7	18.42%	37	6	16.22%
Frederick County	31	6	19.35%	32	9	28.13%
Garrett County	18	8	44.44%	21	7	33.33%
Harford County	53	10	18.87%	37	13	35.14%
Howard County	26	8	30.77%	27	22	81.48%
Kent County	30	16	53.33%	25	14	56.00%
Montgomery County	20	14	70.00%	59	12	20.34%
Prince George's County	44	12	27.27%	38	3	7.89%
Queen Anne's County	35	3	8.57%	31	2	6.45%
Somerset County	29	11	37.93%	10	6	60.00%
St. Mary's County	27	4	14.81%	27	5	18.52%
Talbot County	29	18	62.07%	44	22	50.00%
Washington County	34	20	58.82%	27	9	33.33%
Wicomico County	32	6	18.75%	52	5	9.62%
Worcester County	31	2	6.45%	27	2	7.41%
TOTAL	1,085	256	28.54%	903	215	23.81%

2.4.2.2. Survey Protocols

Tobacco Coordinator Surveys were developed to respond to specific evaluation questions, with cooperation and input from DHMH CRF Tobacco Program staff. The surveys contained 20 questions, most with multiple sub-questions, and were divided into three main sections: Description of the Program, Program Planning, and Program Implementation. The questions were primarily closed ended with Likert

type scale response options, with some dichotomous and open-ended short answer questions also included. The following topics were addressed:

1. Program capacity: staffing, funding levels;
2. Coalition activity: meeting frequency, experience with MOTA, minority participation and outreach, coalition representation;
3. Program planning: awareness and use of evidence-based screening guidelines and State and local data, coalition input;
4. Facilitators and barriers to program implementation: funding levels, data availability, community support; and
5. Administration: DHMH oversight, reporting requirements.

Cancer Coordinator Surveys were developed to respond to specific evaluation questions, with cooperation and input from DHMH CRF Cancer Program staff. The surveys contained 17 questions, most with multiple sub-questions, and were divided into three main sections: Description of the Program, Program Planning, and Program Implementation. The questions were primarily closed ended with Likert type scale response options, with some dichotomous and open-ended short answer questions also included. The following topics were addressed:

1. Program capacity: staffing, funding levels;
2. Coalition activity: meeting frequency, experience with MOTA, minority participation and outreach, coalition representation;
3. Program planning: awareness and use of State and local data, coalition input;
4. Facilitators and barriers to program implementation: funding levels, data availability, community support; and
5. Administration: DHMH oversight, reporting requirements.

MOTA Grantee Surveys were developed with input from DHMH MOTA Program staff to examine evaluation questions related to MOTA performance requirements and local outreach efforts. The surveys contained 15 questions, most with multiple sub-questions, and were divided into three main sections: Description of the Program, Program Planning, and Program Implementation. The questions were primarily closed ended, with some dichotomous and open-ended short answer questions included. The following topics were addressed:

1. Program capacity: staffing, funding levels;
2. Coalition activity: meeting frequency, facilitators and barriers to meeting participation;
3. Program planning: extent to which minority coalition members are invited to participate in program planning, extent to which program plans reflect minority needs and input; and
4. Facilitators and barriers to program implementation: funding levels, data availability, availability of culturally appropriate materials; and
5. Administration: DHMH oversight, reporting requirements.

2.5. Data Analysis Methods

2.5.1. Archival Data Analysis

Data analysis of the archival data consisted of (1) tabulations of the abstracted data with tests of significance where applicable and (2) qualitative analyses of meeting notes, proposals, and progress reports.

Data coding forms were developed to abstract data from each archival source. The coding forms were designed to record values presented in the archival sources (e.g., budgets for specific elements of a program) and to code characteristics of information presented (e.g., whether specific program goals target specific populations). Data dictionaries and coding instructions were developed, and those doing the coding received training in abstracting data and recording them on the forms. All data were entered into Excel spreadsheets that, where appropriate, specified allowable values for each field.

Analysis of the quantitative archival data consisted primarily of tabulating data coded from the documents. Qualitative analysis techniques were used to examine the data from meeting notes, proposals, and progress reports. This involved identifying specific themes expressed in the notes and sources of the statements corresponding to these themes. To the extent possible, the qualitative data were used to provide evidence of participation of individuals from different sectors and racial backgrounds in program and coalition activities.

2.5.2. MYTS and MATS Data Analysis

In analyzing the MYTS, the middle school (grades 6-8) and high school (grades 9-12) data sets used in the analysis excluded all respondents age 18 and older because the statute requires data collection on underage youth (also, such youth can legally purchase cigarettes) and excluded respondents with missing data on the age variable. All analyses of the middle school and high school data were conducted as weighted analyses using the final survey weights separately developed for the middle school and high school populations for each survey year. All adult data were conducted as weighted analyses using the final survey weights for each survey year.

All analyses were conducted using survey-specific procedures (such as SAS PROC SURVEYFREQ) that are designed to yield appropriate estimates of the standard error (and confidence intervals) for each prevalence estimate, taking into account the complex clustering and stratification used in the survey design.

Each prevalence estimate in this report is a weighted estimate of the proportion of middle school or high school youth who engage in the specified behavior (e.g. smoke cigarettes in the past 30 days). Each prevalence estimate is accompanied by the 95% confidence interval for the estimate, as well as the weighted estimate of the number of individuals in the population who engage in the specific behavior.

In general, if any given prevalence estimate was based on fewer than 30 respondents reporting that they engaged in a particular behavior (i.e. fewer than 30 respondents in the numerator of any given proportion), the prevalence estimate for that group or subgroup was determined to be imprecise and unstable and thus the estimate was not reported.

Year to year differences in the trends of various behaviors, attitudes and characteristics (as well as all subgroup differences – male vs. female etc) were assessed by examining the overlap in the 95% confidence intervals between the groups under comparison. Prevalence estimates whose confidence intervals do not overlap were determined to represent a statistically significant difference. This confidence interval approach was employed (instead of z tests for differences in proportions for independent groups)

so that comparisons could be made with previously published estimates. Note that comparing confidence intervals is a conservative approach to significance testing. Confidence intervals that do not overlap are clearly significant differences, but in some cases, confidence intervals for two prevalence estimates can overlap slightly and still be significantly different. Some additional analyses employed chi-square (and related measures) and correlation measures.

2.5.3. Extant Data Analysis for Cancer Program Outcomes

Analysis of extant data for Cancer program outcomes involved compiling data that has already been tabulated, utilizing on-line data tabulation tools such as those provided on the CDC BRFSS website and Maryland's State BRFSS website, and examining significance based on confidence intervals for pertinent variables and years. Although data about Maryland cancer screening behaviors from the Maryland Cancer Surveys is presented in the report, trend information and national comparisons are made using CDC BRFSS data because there is comparable national data in BRFSS and it provides three data points from which trends can be examined, as opposed to two data points provided by the Maryland Cancer Survey.

2.5.4. Data Analysis of Local Program Surveys and In-depth Interviews

For the survey data, all non-response and not applicable responses were treated as missing data prior to calculating proportions, means, and standard deviations. Scores from Likert scale items in each survey were coded such that high scores indicate satisfaction or agreement and low scores indicate dissatisfaction or disagreement. Survey data was aggregated across respondents. Pearson's rho was computed to examine correlations between selected items in the surveys.

The data from the in-depth interviews was analyzed using qualitative techniques. Information was examined and categorized into emerging themes. The evaluation questions were used as a guide to creating the interview protocols, and as a guide to analyzing the data. All interview responses were reported in aggregate, across type of respondent, to protect the confidentiality of individual interviewees.

2.6. Economic Evaluation Methodology

2.6.1. Economic Impact Analysis of the Tobacco Program

The Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) tool is the core methodology used to calculate all three types of economic costs associated with tobacco use in Maryland. SAMMEC, developed by the Centers for Disease Control (CDC), is a well-established methodology that has been used by a number of states to calculate the costs associated with smoking. Further, SAMMEC has been validated by the U.S. General Accounting Office (GAO), which found that SAMMEC used "approaches that were generally accepted among economists and relied on large federal data sources" and that the estimates were reasonable (GAO, 2003). Nevertheless, in this report, we have also calculated the costs using alternative methodologies to assess the robustness of the SAMMEC results.

All methods used in this economic impact analysis are based on the "prevalence" approach, which differs from an incidence-based approach in that it does not deduct any costs savings arising from early death as a result of smoking-related diseases.

2.6.2. Economic Impact Analysis for the Cancer Program

The economic analysis of the Cancer Program included two components. First, the analysis focused on colorectal cancer screenings, which are provided by more jurisdictions to more individuals than any other type of cancer screening. Unlike the Tobacco Program, where the action of stopping (or not starting) smoking is the catalyst for the economic savings, a single screening, by itself does not create long-term

economic savings. Rather, it is the schedule of various types of screenings at various times over the course of several decades, combined with medical attention to the ‘true positive’ results, i.e., results that correctly identify the presence of colorectal cancer, of the tests, which create the long-term cost-effectiveness. The subject of many research efforts is to evaluate and determine which of the screening schedules is most efficient, though all agree that any of the commonly-used screenings, as compared to no screening, is cost-effective when considering the increased life expectancy. Therefore, this analysis presents the results of the research, summarizing various results in terms of cost-effectiveness and life expectancy for various screenings to emphasize the importance of conducting screenings (Section 4.1.2).

Second, the analysis examined the screenings provided through the program and compared Maryland and national rates of screening. This was done for all cancers screened for through the Cancer Program. In addition, this analysis summarized the provision of free screenings to minority populations, which consistently have lower screening rates than their White counterparts, and the uninsured (Section 4. 2.1).

Chapter 3: Tobacco Program Findings

3.1. To what Extent were the Tobacco Goals Met?

3.1.1. To what Extent were the Tobacco Managing for Results (MFR) Reports (Benchmarks) and Short- and Long-Term Goals Met?

3.1.1.1. Overview

In FY2001, the Tobacco Program set up a series of goals to be met by FY2004. Each goal was associated with objectives and measurable outcomes, and estimated performance targets were projected for subsequent years. These associated measurable outcomes were re-projected over time to estimate outcomes to calendar year (CY) 2010. This section uses information derived from the MFR reports to estimate the extent to which short- and long-term goals are being met by the programs. The following overarching goals were established in FY2001:

Goal 1. To reduce the proportion of Maryland youth who initiated the use of tobacco products. The benchmarks for reducing cigarette and smokeless tobacco initiation set by the State in their MFR reports were met for both middle school and high school youth in 2002 and 2006. There were significant reductions in initiation of cigarette use among both groups across all years. There were no net changes in initiation of smokeless tobacco use for middle school or high school youth from 2000 to 2006.

Goal 2. To reduce the proportion of Maryland residents currently engaged in tobacco-related risk behaviors detrimental to their health and the health of others. The State set goals for reductions in current cigarette smoking and smokeless tobacco use among youth and adults. The percent of middle and high school students who are current cigarette smokers decreased significantly each year from 2000 through 2006. The percent of current adult cigarette smokers was significantly lower in 2002 and 2006 than it was in 2000. Although there was a decrease in current cigarette smoking among adults from 2002 to 2006, this decrease was not significant. Smokeless tobacco use among middle school students and adults didn't change during any of the years. Among high school students, there was a non-significant increase from 2000 to 2002, and a significant decrease from 2002 to 2006.

Goal 3. To reduce negative disparities in the prevalence of tobacco-related risk behaviors between population groups, especially targeted minorities. There were reductions in overall disparities in current tobacco use prevalence between Asian adults (lowest) and all other race and ethnic groups from 2000 to 2006. There was also a reduction in disparities in current tobacco use between males and females during the same time period.

Goal 4. To sustain community-based comprehensive tobacco control strategies through the local public health component of the Tobacco Program. It was estimated that all 24 jurisdictions will submit grant applications and receive funding to support the local public health component of the Tobacco Program. Since the inception of the program, all 24 programs have accomplished this.

Goal 5. To counteract tobacco industry marketing and advertising efforts by exposing target audiences to sustained countermarketing and media campaigns. Although the funding for the countermarketing and media campaign was reduced by 95% after the start of the program, the CRFP began promoting the State Quitline in 2006. In 2006, almost half of Maryland adults indicated that they are aware that cessation help is available to them through the Quitline or their local health departments, and smokers were significantly more likely to indicate awareness than nonsmokers.

Goal 6. To change the existing environmental context in Maryland communities from toleration of promotion of tobacco use to a context that does not condone the use of tobacco products. Progress

toward this goal was indicated each survey year from 2000 to 2006. While the proportion of adults that agree that cigarette smoke is dangerous to youth increased, the proportion of minors living in smoking homes decreased.

3.1.1.2. Goal 1: To Reduce the Proportion of Maryland Youth who Initiated the Use of Tobacco Products

Associated with the goal to reduce the proportion of underage Maryland youth who have ever initiated tobacco use were the objectives to reduce the proportion of middle and high school students who ever smoked a whole cigarette and those who ever used smokeless tobacco. As shown in Table 3-1, the estimates that the State set for reducing initiation based on these indicators were exceeded for both years among middle school and high school youth.

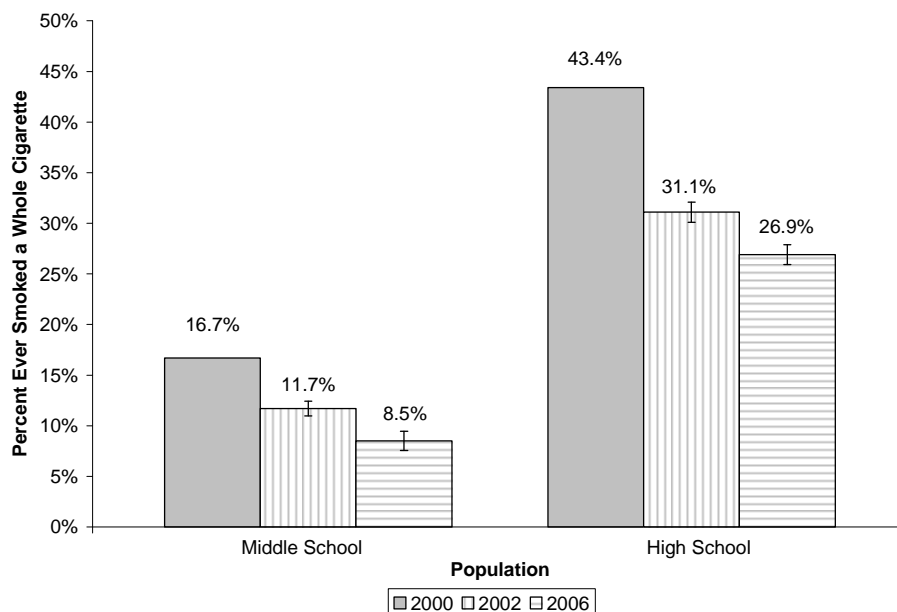
Table 3-1. MFR Estimates and Actual Initiation of Cigarette and Smokeless Tobacco Use among Underage Youth

Population	Ever Smoked a Whole Cigarette				Ever Used Smokeless Tobacco			
	2002		2006		2002		2006	
	Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual
Middle School	16.4%	11.7%	11.3%	8.5%	3.8%	3.5%	7.18%	3.6%
High School	41.9%	31.1%	33.5%	26.9%	10.0%	8.8%	12.6%	9.9%

Source of estimates – Annual MFR Reports prepared by DHMH
Source of actual prevalence – MYTS

Initiation of cigarette use, as measured by middle school and high school youth who indicated that they had ever smoked a whole cigarette decreased significantly from 2002 to 2006, and likely for each year, though no confidence intervals were reported in published 2000 data. In fact, there was a 49.1% decrease in initiation of cigarette use among middle school students and a 38.0% decrease in initiation among high school students from 2000 to 2006 (Figure 3-1).

Figure 3-1. Progress towards Reducing Initiation of Cigarette Use among Maryland Underage Youth

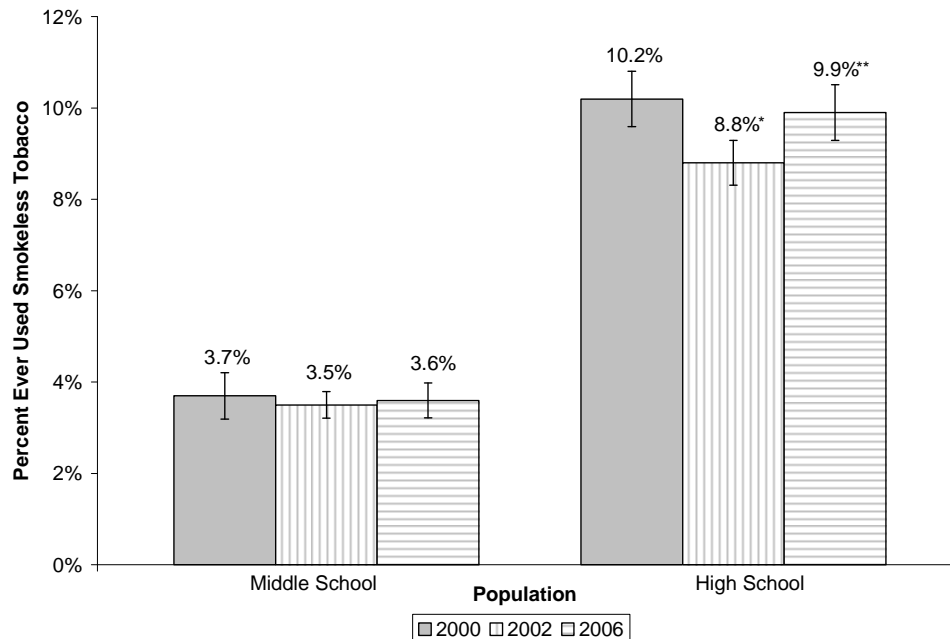


Source: Maryland ATS and YTS

*Note: no confidence intervals were reported in published 2000 YTS data

Although the benchmarks for reducing smokeless tobacco use among Maryland youth were met, the data indicates that there has been no change in initiation among middle school students. Although there was a significant decrease in initiation of smokeless tobacco use among high school youth between 2000 and 2002, there was a significant increase in 2006, resulting in no net change in this behavior from baseline to 2006 (Figure 3-2).

Figure 3-2. Progress towards Reducing Initiation and of Smokeless Tobacco Use among Maryland Underage Youth



Source: Maryland ATS and YTS

* = Significant change from 2000; ** = Significant change from 2002; *** = Significant change from 2000 and 2002

3.1.1.3. Goal 2: To Reduce the Proportion of Maryland Residents Currently Engaged in Tobacco-Related Risk Behaviors Detrimental to Their Health and the Health of Others

Associated with the goal to reduce the proportion of Maryland residents currently engaged in tobacco-related risk behaviors, the State set goals to reduce the percent of youth and adults that are current cigarette smokers and who are current smokeless tobacco users. As indicated in Table 3-2, with the exception of current smokeless tobacco use among high school students in 2002, all of the estimates that were set for accomplishing this goal were met or exceeded. The MFR was reduced to exclude the goal for smokeless tobacco in 2006.

Table 3-2. MFR Estimates and Actual Current Prevalence Rates by Population Type

Population	Current Smoker				Current Smokeless Tobacco User			
	2002		2006		2002		2006	
	Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual
Middle School	7.1%	5.2%	4.8%	3.7%	2.1%	2.1%	—	1.9%
High School	23.0%	18.7%	16.8%	14.7%	4.9%	5.2%	—	4.8%
Adult	17.0%	15.4%	15.1%	14.8%	1.1%	1.0%	—	1.1%

Source of estimates – Annual MFR Reports prepared by DHMH

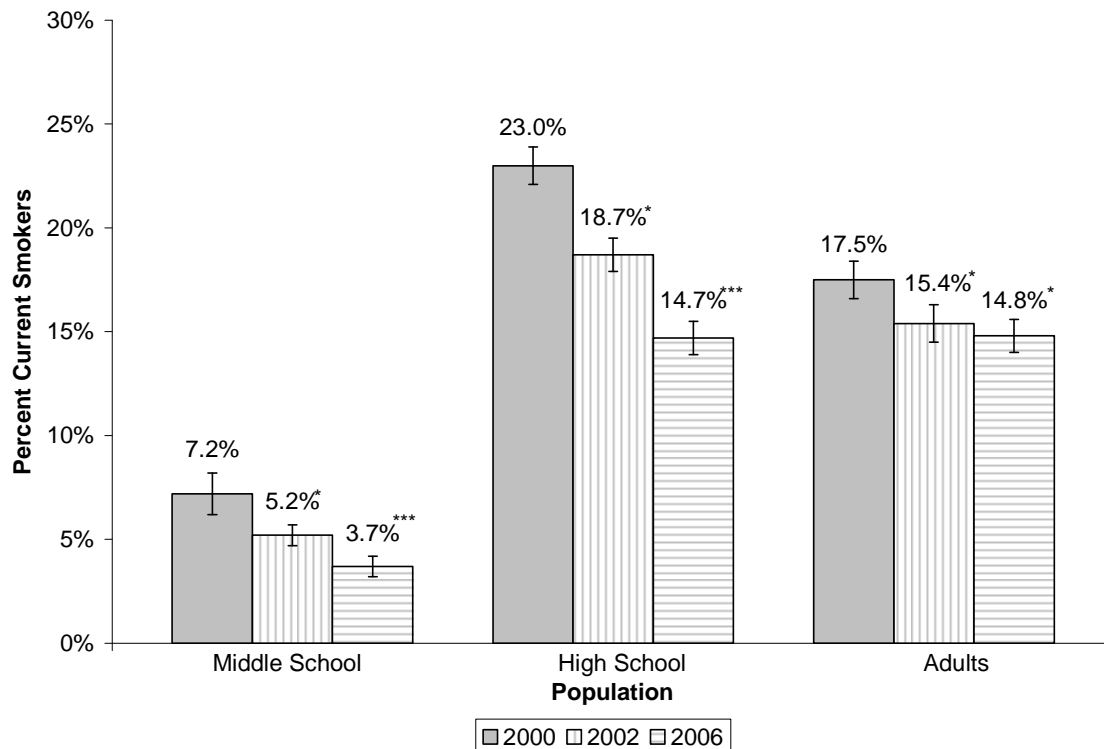
Source of actual prevalence – MYTS and MATS

— = Estimates were not set for 2006 smokeless tobacco use

Youth includes only those respondents under 18 years of age

In addition to meeting the goal estimates set in the annual MFR reports, as shown in Figure 3-3, current cigarette smoking prevalence among middle school and high school youth decreased significantly during each survey year from 2000 through 2006. Although adult current cigarette smoking prevalence declined from 2002 to 2006, this decrease was not significant. However, adult cigarette smoking prevalence was significantly lower in both 2002 and 2006 than it was at baseline in 2000.

Figure 3-3. Progress towards Reducing Current Cigarette Smoking among Maryland Underage Youth and Adults

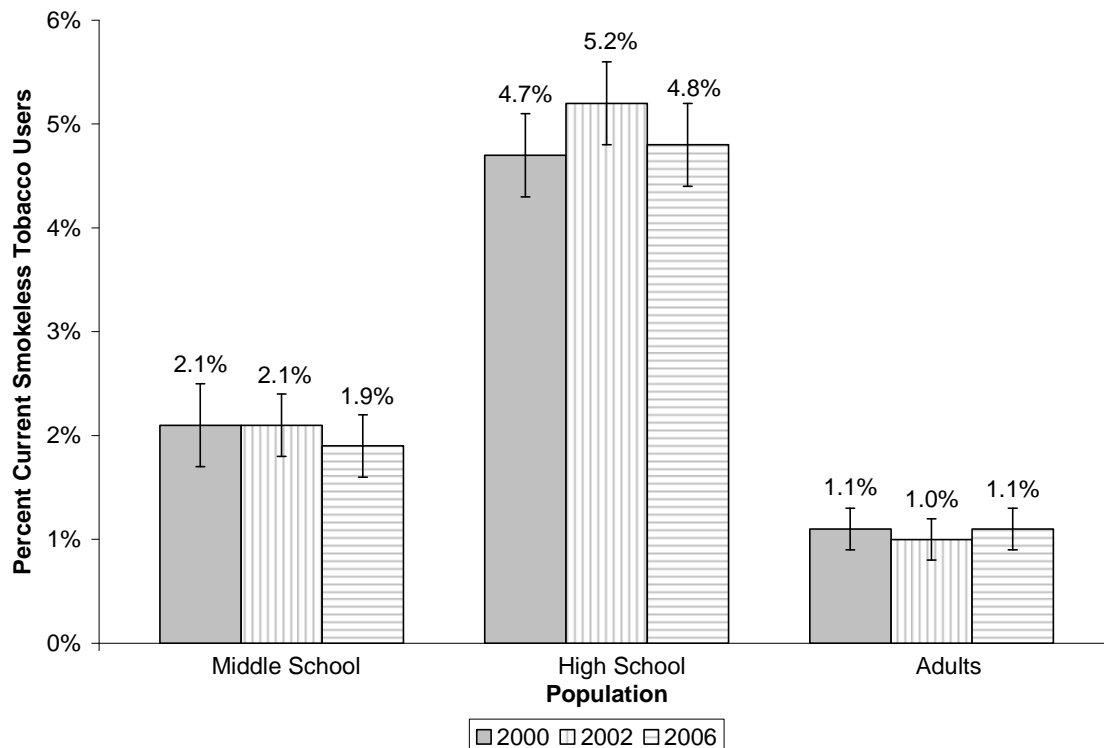


Source: Maryland ATS and YTS

* = Significant change from 2000; ** = Significant change from 2002; *** = Significant change from 2000 and 2002

Current smokeless tobacco use among middle school youth has remained very low from 2000 through 2006, and showed a slight, but non-significant decline from 2002 to 2006. Although current smokeless tobacco use saw an among high school youth from 2000 to 2002, the prevalence decreased from 2002 to 2006. Prevalence of current smokeless tobacco use among adults remained at approximately 1.0% across all years (Figure 3-4). A floor effect in prevalence among middle school youth and adults makes it unlikely that any observable changes will occur over time.

Figure 3-4. Progress toward Reducing Smokeless Tobacco Use among Maryland Underage Youth and Adults



Source: Maryland ATS and YTS
^ = Data was not collected in 2004

3.1.1.4. Goal 3: To reduce negative disparities in the prevalence of tobacco-related risk behaviors between population groups, especially targeted minorities

To achieve the goal of reducing negative disparities in prevalence of tobacco-related risk behaviors, the State set goals to reduce the relative proportion of ethnic and racial minorities who are current tobacco users. The estimates were set using the lowest prevalence group, Asian adults, as the comparison group by which to show reductions in disparities among all other groups.

As shown in Table 3-3, from 2000 to 2002 there were reductions in disparities between Asian current tobacco use prevalence (lowest) and all other race and ethnic minority current tobacco use prevalence. However, there was an increase in the disparity between females and males during that time period. From 2002 to 2006, there were increases in disparities in current tobacco use among all race and ethnic minorities in comparison to Asian current tobacco use, but there was a reduction in the male-female disparity. Overall, from 2000 to 2006, there were reductions in disparities among all comparison groups.

The reversal in the trend of ethnic and racial disparities from 2002 to 2006 can be explained by the observation that there was an increase in current tobacco use among the Asian survey respondents during 2002, while prevalence among White, African American, and Native Americans declined during that same time period (Table 3-4 and Figure 3-5). This created a large decrease in disparities from 2000 to 2002. While the current tobacco use prevalence returned to baseline rates among Asians in 2006, the slope of the decline in prevalence among Whites and African Americans remained fairly constant, and the prevalence among Native Americans increased, resulting in the increase in disparities observed from 2002 to 2006 among these groups. Importantly, current tobacco use prevalence among all groups was lower in

2006 than in 2000, and this difference was significant among White, African American, and Hispanic adults, as well as for males and females.

Table 3-3. Changes in Disparities in Current Tobacco Use among Select Groups

Comparison	2000-2002	2002-2006	2000-2006
Asian-White	-39.2%	38.7%	-15.7%
Asian-Hispanic	-30.0%	2.0%	-28.6%
Asian-African American	-47.3%	51.3%	-20.3%
Asian-Native American	-30.6%	32.0%	-8.5%
Male-Female	6.3%	-9.2%	-3.6%

Source: Maryland ATS

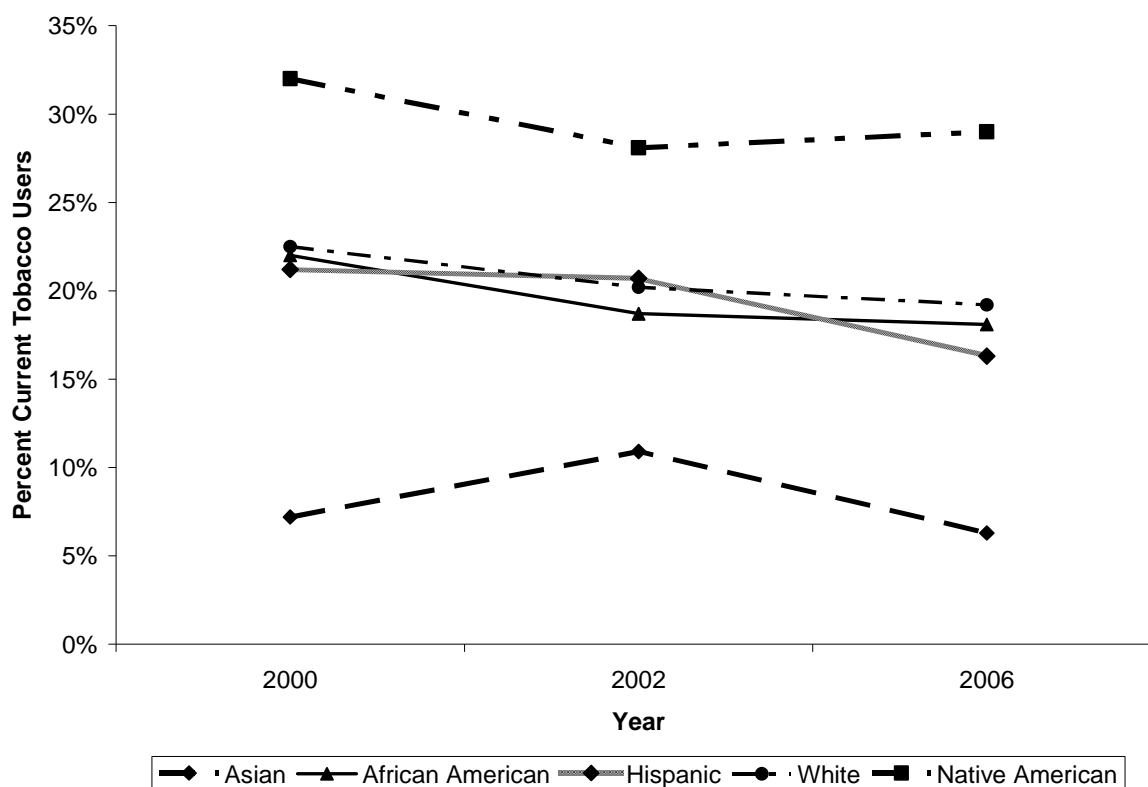
Note: A negative number indicates a decrease in disparity, a positive number indicates an increase in disparity

Table 3- 4. Current Tobacco Use Trends by Race/Ethnicity and Survey Year

Population	2000		2002		2006	
	Weighted N	% (CI)	Weighted N	% (CI)	Weighted N	% (CI)
Asian	9,813	7.2% (3.8%-10.5%)	10,554	10.9% (5.5%-16.3%)	7,260	6.3% (3.2%-9.5%)
African American	204,337	22.0% (19.7%-24.3%)	190,299	18.7% (16.6%-20.8%)	189,134	18.1% (16.2%-20.1%)
Hispanic	27,779	21.2% (15.5%-26.9%)	47,317	20.7% (14.2%-27.1%)	43,922	16.3% (12.4%-20.1%)
White	560,185	22.5% (21.4%-23.6%)	499,312	20.2% (19.1%-21.3%)	473,011	19.2% (18.2%-20.3%)
Native American	19,265	32% (23.0%-41.1%)	15,871	28.1% (20.6%-35.7%)	11,715	29.0% (19.7%-38.4%)

Source: Maryland ATS

Figure 3-5. Progress toward Reducing Negative Disparities in Current Tobacco Use Prevalence



Source: Maryland ATS

3.1.1.5. Goal 4: To sustain community-based comprehensive tobacco control strategies through the local public health component of the Tobacco Program

The goal for sustaining community-based comprehensive tobacco control strategies through the Local Public Health Component of the Tobacco Program was accomplished through the review, approval, and funding of school-based and community-based enforcement and cessation efforts in each of the 24 Maryland jurisdictions. Local programs have been funded in each jurisdiction beginning in FY2001 and continue to be funded.

3.1.1.6. Goal 5: To counteract tobacco industry marketing and advertising efforts by exposing target audiences to sustained countermarketing and media campaigns.

The goal for implementing and sustaining a countermarketing and media campaign was achieving progress in FY2002. However, due to changes in funding, that component of the program, which was initially funded at \$10 million, was reduced by 95%. Currently, funds available for the countermarketing and media component have been redirected toward generating awareness for the statewide cessation quitline that began implementation in FY2006. However, according to the State prepared MFR report for FY2005, in FY2002, 61.5% of adults in the general population and 54.8% of minority population saw CRFP media messages. According to the results of the 2006 MATS, 70.9% of adults in the general population and 73.9% in the minority population saw or heard media messages about the dangers of smoking one or more times in the 30 days prior to participating in the survey. Minority individuals (73.9%) were significantly more likely than non-minorities (69.2%) to report having been exposed to media messages about tobacco risks within the 30 days prior to participating in the survey.

Examining exposure to media messages further, , individuals who are current smokers were significantly more likely to report having seen or heard messages about tobacco risks (82.1%) during the 30 days prior to taking the survey than those who are not current smokers (69.0%). In 2006, the State implemented a statewide Quitline, and began promoting the availability of cessation help through the Quitline. The 2006 MATS included a question asking whether individuals are aware that cessation help is available through their local health departments or the State Quitline. Overall, 47.9% of adults indicated that they were aware that help is available. Current smokers were significantly more likely to indicate awareness (59.5%) than those who do not currently smoke (45.9%) (Table 3-5).

Table 3-5. Media Exposure and Awareness of Cessation Assistance by Smoking Status

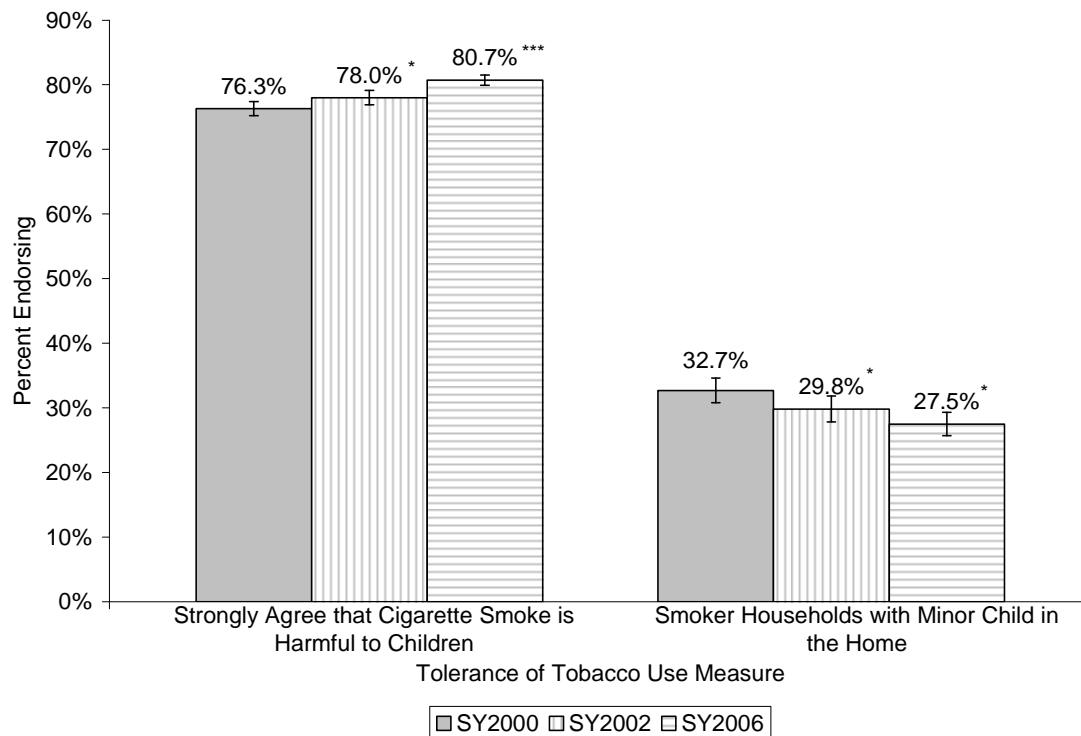
	All Adults	Current Smokers	Current Nonsmokers
Percent exposed to media messages about tobacco risks	70.9 (69.9-71.9)	82.1 (79.8-84.4)	69.0 (67.9-70.1)
Percent aware of help through local health department or Quitline	47.9 (46.9-49.0)	59.5 (56.5-62.4)	45.9 (44.8-47.0)

Source: 2006 Maryland ATS

3.1.1.7. Goal 6. To change the existing environmental context in Maryland communities from toleration of promotion of tobacco use to a context that does not condone the use of tobacco products.

Progress toward achieving the goal of reducing tolerance and promotion of tobacco use was examined by measuring the number of adults who agree that smoking is harmful to children and the percentage of youth living in smoke-free homes. As shown in Figure 3-6, there were significant increases in the percent of adults that strongly agree that cigarette smoke is harmful to children each survey year from 2000 to 2006 and significant decreases in the percent of smoker households with minor children in the home from 2000 to 2002 and 2006.

Figure 3-6. Progress toward Reduction of Tolerance and Promotion of Tobacco Use



Source: Maryland ATS

* = Significant change from 2000; ** = Significant change from 2002; *** = Significant change from 2000 and 2002

3.1.2. To what Extent did the Components in the Tobacco Program Support the Control of Smoking in Maryland?

3.1.2.1. Overview

There are four major components to the CRFP Tobacco Program: surveillance and evaluation, counter-marketing and media, statewide programs, and local public health. This section discusses each component of the CRFP Tobacco Program, provides detailed information about the activities of the local health component, presents statewide and jurisdiction-level outcomes from the MATS and MYTS, and provides an economic impact analysis of tobacco use in Maryland.

Surveillance and evaluation. The surveillance and evaluation component is aimed at monitoring the State's progress in reducing tobacco use, increasing awareness of the risks of tobacco use, and decreasing acceptance of pro-tobacco activities by conducting a baseline study (conducted in 2000) and follow-up studies (conducted in 2002 and 2006) of Maryland adults and youth.

Counter-marketing and media. According to the statute, the purpose of the counter-marketing and media component of the CRFP Tobacco Program is to "coordinate a statewide counter-marketing and media campaign to counter tobacco advertisements and discourage the use of tobacco products." The funds for this component were reduced by 95% after the start of the Program, and the funds that remain are being used to promote Maryland's statewide tobacco cessation quitline. There is evidence that activities under this component are working to increase awareness of the quitline.

Statewide programs. According to the statute, the statewide public health component of the program is intended to maximize program effectiveness and ensure statewide program implementation and

coordination. Prior to FY2006, when funds became available for implementing Maryland's statewide cessation quitline under the statewide component, funding was only available for the MOTA program and the Legal Resource Center. There was and is no funding under this component for local program staff. Between June 2006 and January 2007, 1,964 tobacco users called the Quitline and most of the callers heard about the Quitline through media advertising.

Local public health. The local public health component focuses on the following four areas of tobacco use prevention: Community-based programs, school-based programs, enforcement of existing tobacco control laws, and smoking cessation. These elements are recommended by the CDC's Best Practices approach to statewide tobacco programs.

- Community-based programs. Community-based program activities accomplished a broad reach over the course of the Program through community coalition, faith-based, and secondhand smoke reduction programs. The program attendance to these program activities reached 1,345,675 since FY2004. Community-based program activities fluctuated with local public health funding.
- School-based programs. School-based activities implemented by local Tobacco programs include education, peer programs, smoking cessation programs, staff training, cessation, and reinforcement of school tobacco policies. Program activities target not only youth, but also adults through college programs and education activities for parents of pre-kindergarten students.
- Enforcement of existing tobacco control laws. Merchant education on youth access and product placement laws is provided under the enforcement element of the local Tobacco programs. Programs also conducted compliance checks, and issue citations to merchants for noncompliance with sales, product placement and clean indoor air laws and to youth for tobacco possession.
- Smoking cessation. Local cessation activities included conducting cessation groups, providing cessation counseling, and providing smoking cessation aids to individuals who need them to quit. A total of 70,696 attendees have received either group or individual cessation counseling and classes through the local Tobacco programs.

Statewide tobacco outcomes. Maryland has seen positive outcomes in significant reduction or maintenance of low prevalence of youth smoking and tobacco use from 2000 to 2006 among middle school and high school youth and within subpopulations including females and minorities. There has also been a significant decline in youth reporting early smoking initiation, and significant increases in youth indicating that they are not open to smoking over time.

Adult tobacco outcomes similarly show positive outcomes in significant reduction of prevalence of current smoking and tobacco use from baseline to 2006, and these reductions are evident among males, females and minority adults. Although there was no net change in current smokers who made a serious attempt to quit smoking within the past 12 months from baseline to 2006, the proportion of respondents that successfully quit increased significantly over time. There are significantly fewer minors living in homes with an adult smoker in 2006, compared to 2000. Statewide in 2006, nearly 81% of adults endorsed the belief that secondhand smoke is harmful to children.

Economic impact analysis. Overall, it is estimated that smoking costs Maryland over \$2.2 billion in adult medical expenditures and over \$3 million in neonatal medical expenditures annually. Added to the excessive medical cost of smoking are productivity loss and the value of potential years of life lost, which are estimated to be \$1.8 billion and \$10.6 billion each year, respectively, the total annual cost of smoking in Maryland exceeds \$14 billion. It is estimated that \$967 million in adult medical expenditures and \$1.2

million in neonatal medical expenditures can be saved annually if smoking prevalence in Maryland is reduced to the target level set by the Maryland Health Improvement Plan 2000-2010 (MDHMH, 2001).

3.1.2.2. Surveillance and Evaluation

The surveillance and evaluation component is aimed at monitoring the State's progress in reducing tobacco use, increasing awareness of the risks of tobacco use, and decreasing acceptance of pro-tobacco activities by conducting a baseline study and annual follow-up studies among Maryland adults and youth. Additionally, there was a goal of conducting ongoing evaluations of the elements of the local public health component. Although funding has not permitted annual State tobacco use studies, there have been three surveys conducted – the baseline survey in 2000, and follow-up surveys in 2002 and 2006. The outcomes data presented in this section (3.1.2) and in section 3.1.1 of this report come from the MATS and MYTS.

The sampling strategy used for collecting data for the MATS ensures that a sufficient number of respondents are collected from each jurisdiction, and that representation of racial and ethnic minorities and females is sufficient for examination of outcomes among and between groups. Table 3-6 provides a breakdown of the survey population for each year.

Table 3-6. Population Information for MATS Respondents by Survey Year

Population	2000	2002	2006
Male	6,746	6,189	8,259
Female	9,850	9,448	13,540
White	12,676	11,995	16,884
African American	2,692	2,485	3,145
Hispanic/Latino	374	392	684
Asian	249	225	289
Native American	262	275	194
Other	135	88	229
Total (Including missing)	16,596	15,638	21,799

Data for the MYTS is collected via in-school surveys. The same survey is used for middle and high school students, but the data is separated by school type because there are known differences between middle and high school students on most tobacco-related measures. Because the statute mandates that Maryland report on underage youth (under 18 years of age), the data for all youth participants that either did not indicate their age or indicated that they are 18 years old or older were removed from the analyses in this report. However, to remain consistent with national data that is collected, Maryland collects data from all middle and high school students, regardless of age. Table 3-7 presents a demographic breakdown of the participants in the MYTS.

Table 3-7. Population Information for MYTS Respondents by School Type and Survey Year

Population	Middle School			High School		
	2000	2002	2006	2000	2002	2006
Male	11,136	13,610	12,155	16,059	17,813	27,007
Female	11,084	13,547	12,087	17,055	19,557	28,709
White	14,657	17,298	14,913	22,653	23,436	34,059
African American	5,014	6,324	5,832	6,712	8,839	13,523
Hispanic/Latino	829	1,305	1,568	1,836	2,526	4,291
Other	1,647	2,124	1,865	1,927	2,623	3,777
Total (Including missing)	22,295	27,241	24,288	33,305	37,647	55,801

In addition to providing information about trends in tobacco-related attitudes and behaviors, the data from the surveys is used to determine the funding levels for local public health component in each jurisdiction. Base funding is added to funding based on the proportion of smokers within each jurisdiction and each jurisdiction implements the local public health component of the CRFP Tobacco Program.

3.1.2.3. Countermarketing and Media

According to the statute, the purpose of the counter-marketing and media component of the CRFP Tobacco Program is to “coordinate a statewide counter-marketing and media campaign to counter tobacco advertisements and discourage the use of tobacco products.” This component was intended to include a three-phase project with the goal of community mobilization through a targeted statewide media campaign focusing on countering pro-tobacco messages, raising awareness about the need to reduce youth access to tobacco products, raising awareness about the need to reduce exposure to secondhand smoke, and supporting tobacco users in their attempts to quit and stay quit.

The funds for this component were reduced by 95% after the start of the Program, and the funds that remain are being used to promote Maryland’s statewide cessation quitline. There is evidence that activities under this component are working to increase awareness of the quitline. Of the callers that contacted the quitline between June 2006 and January 2007, more than two-thirds (67.6%) heard about the quitline through media or awareness campaigns including newspapers or magazines, outdoor ads, radio, radio commercials, radio news, television commercial, television news, or the internet (Table 3-8).

Table 3-8. Source of Quitline Awareness by Month

Source	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Total
Brochure/Newsletter/Flyer	3	11	13	13	21	27	32	23	143
Cigarette Pack (Quit Assist)	1	1	3	20	7	3	2	2	39
Community Organization	2	6	6	3	5	6	8	22	58
Employer/Worksite	0	3	5	2	3	4	2	11	30
Family/Friend	1	14	9	6	18	16	20	41	125
Health Department	2	7	3	3	8	11	13	13	60
Health Insurance	0	0	0	2	1	3	1	1	8
Health Professional	10	12	12	9	16	13	14	24	110
Newspaper/Magazine	3	17	5	2	0	11	5	14	57
Outdoor Ad	0	2	8	2	4	11	16	21	64
Past Caller	0	0	0	0	2	1	0	4	7
Paycheck Stuffer	0	0	0	0	0	0	0	1	1
Poster	0	0	0	0	0	2	1	3	6
Radio	0	0	0	0	9	61	48	24	142
Radio/Commercial	0	63	27	7	0	0	0	0	97
Radio/News	0	6	8	0	0	0	0	0	14
Sport Event	0	0	0	0	0	0	2	2	4
TV/Commercial	6	13	10	38	46	74	240	562	989
TV/News	0	6	1	0	0	0	7	14	28
Website	0	6	9	1	8	7	6	12	49
Does Not Remember	0	0	0	2	0	0	0	1	3
Other	2	5	5	10	8	12	20	16	78
Refused	1	0	1	0	0	1	1	2	6
Not Collected	3	6	5	4	4	5	2	14	43
Total	34	178	130	124	160	268	440	827	2,161

3.1.2.4. Statewide Programs

According to the statute, the statewide public health component of the program is intended to maximize program effectiveness and ensure statewide program implementation and coordination. Prior to FY2006, when funds became available for implementing Maryland’s statewide cessation quitline under the

statewide component, funding was only available for the MOTA program and the Legal Resource Center. There was and is no funding under this component for local program staff. Between June 2006 and January 2007, 1,964 tobacco users called the Quitline and most of the callers heard about the Quitline through media advertising.

The Legal Resource Center has provides legal assistance to local health departments and jurisdictions through newsletters, trainings, workshops, and targeted technical assistance. It also provides assistance to State legislators during the General Assembly sessions. The Center has worked to train high school students to conduct compliance checks for enforcement, trained undercover agents to participate in Baltimore City's compliance check program, and conducts college law and tobacco control seminars.

The MOTA program is discussed in detail in Chapter 5 of this report. The program is designed to provide outreach and technical assistance to minority communities. There are MOTA grantees working with the Tobacco and Cancer Programs in 17 jurisdictions in FY2006.

The State implemented a statewide tobacco cessation quitline in June 2006. Smokers are provided with an average of four brief intervention sessions including a first session lasting approximately 30-minutes and at least two follow-up sessions lasting approximately 10-15 minutes each. The initial session is initiated by the smoker; the follow-up sessions are initiated by the Quitline counselors. Although no medications are provided through the quitline, referrals are made for free cessation services as needed. The Quitline also provides specialized information for health care providers and others who want to assist people in quitting smoking.

To promote the Quitline, Maryland has a website, flyers and pamphlets for local health departments to distribute newspaper advertisements, television and radio news spots, and television and radio commercial spots. Between June 2006 and January 2007, a total of 1,964 tobacco users have called the Quitline, 584 of who were uninsured. Most of the callers heard about the Quitline through television commercials. Smokers have called from all 24 jurisdictions, with Baltimore City (which is working with the Legacy Foundation to promote the Quitline), Baltimore County, and Prince George's County accounting for almost two-thirds (62.4%) of the callers. See Table B-1 in Appendix B for jurisdiction level detail.

3.1.2.5. Local Public Health

Community-based element. Local Tobacco programs engage in a number of community-based activities: awareness campaigns, community coalition programs, faith-based programs, policy promotion, secondhand smoke programs, and coalition meetings. Some of the main goals of the community-based activities are to raise awareness and increase knowledge by educating the public and community leaders.

From FY2004 to FY2006, 1,345,675 people in the general public attended educational activities through community outreach activities undertaken by local program staff, coalition members, and subvendors to the local programs. The majority of this education attendance occurred during FY2004. Since FY2002, the programs have accomplished the following through community-based programs:

- 4,998 awareness campaigns
- 5,096 community programs including
 - 760 community coalition programs
 - 1,681 faith-based programs

- 2,655 secondhand smoke reduction programs
- 1,001 policy promotion activities
- 694 coalition meetings.

As shown in Table 3-9, many of the community activities peaked in FY2004, decreasing in both FY2005 and FY2006. Funding for the local public health component of the program decreased after FY2003, and has remained flat in FY2005 and FY2006, and the community-level activities implementation appears to reflect the funding changes over time. Overall community programs implemented peaked in FY2004, with coalition programs, faith-based programs, and secondhand smoke reduction programs all increasing during that year. The overall decrease in community programs in subsequent years is primarily driven by the decrease in secondhand smoke reduction programs over time. Policy promotion activities declined by almost one-half from FY2004 to FY2005, and declined again by one-half from FY2005 to FY2006. As would be expected, given the decreases in activities during FY2005 and FY2006, the number of attendees educated through community-based events declined during those years.

Table 3-9. Local Tobacco Program Community-Based Accomplishments by Fiscal Year

Community-Based Activities	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Awareness campaigns	201	—	1,847	1,111	866	973	4,998
Community Programs	21	31	863	1,692	1,443	1,046	5,096
Community coalition programs	—	—	125	230	230	175	760
Faith-based programs	12	31	311	506	511	310	1,681
Secondhand smoke reduction programs	9	—	427	956	702	561	2,655
Policy promotion activities	—	—	59	521	276	145	1,001
Coalition meetings	—	—	218	179	153	144	694
Attendees to community education events		—	—	840,547	352,273	152,855	1,345,675
Local Public Health Budget	\$5,675,000	\$9,225,000	\$9,225,000	\$8,000,000	\$6,960,000	\$6,960,000	

— = No data reported

An examination of activities at the jurisdiction level revealed that there may be differences in local approaches to community-based activities. For example, it appears that Baltimore City emphasized policy promotion to a greater extent than other jurisdictions, while Prince George's County emphasized community leader training to a greater degree than other jurisdictions of similar size. However, the relatively broad definitions of activities limit the detailed comparisons that provide insight about how these differences are affected by such things as budgets, staff allocations, or time constraints on how they affect program reach or depth. For instance, awareness campaigns may mean different things—from presentations at firehouses to materials distribution at offices of health care providers to conducting local media campaigns—and they would have different staffing, budgets and time requirements, and would also reach different audiences.

A similar problem exists with respect to evaluating the effectiveness of local programs by looking at the number of people educated through community-based efforts. As would be expected, the data reveal jurisdiction-level differences in that larger jurisdictions tend to report greater numbers of people educated. However, attendees at multiple events are counted multiple times, so the actual number of individuals reached cannot be assessed. For example, according to estimated US Census data for 2005, Charles County has a population of 138,822 yet the number of people educated in 2004 was listed as 180,345. Similarly, the number of Montgomery County education attendees in 2004 is almost one half of its

population. Therefore, the decrease in number of people educated may reflect an actual decrease in community-based program reach or it may reflect a difference in defining reach from one year to the next or it may reflect errors in either reporting or recording. See Tables B-2 through B-6 in Appendix B for jurisdiction-level information.

School-based element. School-based activities implemented by local Tobacco programs include education, peer programs, smoking cessation programs, staff training, cessation, and reinforcement of school tobacco policies through placing “No Smoking” signs on school property. Local program efforts resulted in the following school-based accomplishments between FY2002 and FY2006:

- There have been 1,330,995 pre-school through college student attendees at school-based education interventions
- There have been 41,209 parents of pre-kindergarteners attendees at school-based education sessions
- There have been a total of 309,435 k-12th grade student attendees at 1,005 peer group activities
- 14,714 students in kindergarten through college have been provided with cessation programs
- There have been 19,185 school staff and daycare provider attendees at training on curricula and tobacco prevention
- 2,214 “No Smoking” signs have been hung in schools.

As illustrated in Table 3-10, kindergarten through 12th grade student attendance at education sessions through school-based activities increased consistently each year from FY2001 through FY2005, then decreased in FY2006. Although the number of pre-kindergarten parent attendees to school-based education activities increased each year after FY2004, the number of pre-kindergarten student attendees decreased during that period. The number of college student attendees to school-based education activities peaked in FY2004, then decreased by one-half in FY2005 and remained level in FY2006. See Tables B-7 through B-9 in Appendix B for jurisdiction level detail.

Table 3-10. Local Tobacco Program School-Based Accomplishments by Fiscal Year

School-Based Activities	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Education attendees							
Pre-kindergarten students	852	—	12,693	14,208	13,508	10,546	51,807
Pre-kindergarten parents	930	—	9,964	8,012	10,458	11,845	41,209
Kindergarten – 12 th grade	11,722	104,606	155,098	309,505	309,505	228,140	1,118,576
Private school	0	—	2,415	11,051	13,382	9,164	36,012
Alternative school	46	—	260	3,067	3,895	2,181	9,449
College students	10	39,820	37,803	44,739	19,008	19,232	160,612
Peer programs							
Number organized	18	—	273	342	213	159	1,005
Number of student attendees	100	—	40,528	204,087	41,041	23,679	309,435
School-based cessation program participation							
Kindergarten-12 th grade	—	1,078	1,986	4,279	1,356	1,208	9,907
College students	10	—	1,051	1,902	1,144	700	4,807
Staff trained							
Daycare and school staff	352	1,087	3,701	5,498	5,566	2,981	19,185
No Smoking signs							
Schools installing signs	214	—	415	971	533	81	2,214

— = No data reported

It is important to note that the data collection system collects attendees, not individuals. The number in attendance to school-based activities does not reflect the number of distinct individuals that have been educated. The attendance data include double counts (or more) of individuals if they have attended multiple education sessions or peer program activities. For example, Cecil County reported 38,669 kindergarten through 12th grade attendees to education activities in FY2004 and 35,809 attendees in FY2005, while that county has an under 18 population of 25,133. Similarly, although the number of student attendees to peer programs increased dramatically in FY2004, this increase is driven in part by the fact that Harford County reported peer program attendance of 118,601 youth, a figure almost twice the size of the under 18 population of that county (see Table B-10 in Appendix B). It is likely the case that in some jurisdictions, programs that are administered across all four quarters may count each individual in each quarterly report, resulting in a quadruple count of each individual. However, in other jurisdictions, attendance may not be counted in the same way. Therefore, it is difficult to assess program impact due to school-based activities as a function of attendance to activities.

Many of the peaks in reporting can be traced to activities in one or two counties. The number of kindergarten through twelfth grade students and college students for whom cessation programs were provided peaked in FY2004. These peaks appear to be driven by an increase in Montgomery County's reported cessation program provision for kindergarten through twelfth grade, and Baltimore County's reported cessation program provision for college students (see Table B-11 in Appendix B). The increases in staff training are almost completely accounted for by reported activity in Frederick County in FY2004 and in Anne Arundel County in FY2005. Similarly, the increased reports of installment of "No Smoking" signs in schools during FY2004 can be traced to Montgomery County (see Tables B-12 and B-13 in Appendix B).

The data show local variability among programs. For instance, in FY2005, Anne Arundel County appears to put emphasis on younger children, with programs targeting daycare providers and pre-kindergarten students and their parents. Frederick and Montgomery Counties reported a large number of students reached through peer programs during that same period. It is also notable that both of these counties have youth representatives on their coalitions. In fact, Frederick County has the largest percentage of youth members (33%) of any coalition in the State. Similar differences in program emphasis occurred in all years for which data are available. However, due to the data issues raised, explanations cannot be attributed directly to programmatic emphasis.

Enforcement element. Local Tobacco programs provided merchant education on youth access and product placement laws and conducted compliance checks. They gave merchants citations for noncompliance with sales, product placement and clean indoor air laws, and cited youth for tobacco possession. From FY2002 through FY2006, local Tobacco programs accomplished the following through their enforcement activities:

- 45,202 merchants attended education about youth access laws and 43,929 about product placement laws
- 26,414 youth access and 19,794 product placement compliance checks were performed
- 7,560 citations were delivered or facilitated.

As shown in Table 3-11, the number of merchants educated about youth access and product placement laws more than doubled from FY2003 to FY2005. Although the number of merchants educated declined in FY2006, it remained substantially higher than FY2003. Most of the increase observed can be attributed to education activities reported by Baltimore City between FY2003 and FY2006. Compliance check activities remained constant for most jurisdictions, but changes from year-to-year within Baltimore City

created what looks like large statewide fluctuations between years through FY2005. Citations for youth possession were the most likely type of citations within each year, and clean indoor air citations were the least likely. There was an overall decrease in the number of citations given throughout the State for all types of infractions, but it is not clear what factors have driven the decrease. It may be that education and compliance checks have made merchants less likely to sell cigarettes to minors and more likely to abide by product placement laws, but it is not clear whether this is the case. Just looking at the FY2005 data, there is a weak negative relationship ($r = -0.20$) between the number of compliance checks and the number of citations. This may suggest that whereas some jurisdictions cast a wide net, others may be more strategic in where they conduct compliance checks (e.g., based on information about underage sales). See Tables B-14 through B-16 for jurisdiction-level detail.

Table 3-11. Local Tobacco Program Enforcement Accomplishments by Fiscal Year

Enforcement Activities	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Merchant education attendance							
Youth access	158	—	6,015	12,645	15,077	11,307	45,202
Product placement	0	—	6,608	11,533	15,187	10,601	43,929
Compliance checks conducted							
Youth access	494	4,853	2,771	7,778	4,937	5,581	26,414
Product placement	0	0	5,209	4,179	5,645	4,761	19,794
Citations issued							
Youth sales	11	854	539	456	600	827	3,287
Product placement	—	—	100	13	50	37	200
Youth possession	106	859	975	731	765	602	4,038
Clean indoor air (facilitated)	—	—	9	22	3	1	35

— = No data reported

Cessation element. Local cessation activities included conducting cessation groups, providing cessation counseling, and providing smoking cessation aids to individuals who need them to quit. An important aspect of the entire CRFP Tobacco Program is the goal of reducing disparities among racial and ethnic minorities, and among women and pregnant women. Local Tobacco programs accomplished the following through their cessation activities during FY2002 through FY2006:

- Involved 30,675 individuals in smoking cessation groups
- Increased the percentage of racial and ethnic minorities and pregnant women involved in cessation groups from FY2003 to FY2006
- Provided smoking cessation counseling to 40,021 individuals
- Provided smoking cessation aids to 14,985 individuals.

There was a consistent statewide increase in the number of people enrolled in cessation groups from FY2002 through FY2005, but a decrease in FY2006 (see Table 3-12). However, those increases were not uniform across local jurisdictions. Some counties (Baltimore, Caroline, and Charles) reported peaks in cessation group enrollment in FY2003, while others (Carroll, Dorchester, Garrett, Harford, Howard, and St. Mary's) reported fluctuations each year, beginning with a decline in FY2003. Two counties (Kent and Wicomico) reported decreases in cessation group enrollment each year.

There may be active outreach ongoing in particular counties. However, a thorough examination of jurisdiction level differences in minority cessation group enrollment is not feasible because the underlying activities and outreach are not readily linked to the data. Nonetheless, many counties reported cessation group enrollment of greater percentages of individuals within particular minority groups than the

percentages of those minority groups within their counties. This may suggest that there is active outreach ongoing in those communities.

The data also reveal variability in the provision of different types of cessation aids over time. In FY2002, the only type of cessation aids reported to be distributed was nicotine patches, and the nicotine patch remained the most commonly distributed aid for all years. Although nicotine gum was only reported to have been distributed to 12 people in FY2003, its reported distribution was more than double that of Zyban in FY2005. There was variability in the number of jurisdictions providing each type of cessation aid over time, as well. Although the number of jurisdictions distributing nicotine gum increased consistently over time, the number of jurisdictions distributing the patch and Zyban peaked in FY2004 and declined in FY2005. See Tables B-17 and B-18 for jurisdiction-level detail.

Table 3-12. Local Tobacco Program Cessation Achievements by Fiscal Year

Cessation Activities	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Total cessation group enrollment	132	3,300	5,599	7,502	8,178	5,964	30,675
Percent enrolled in cessation groups representing target populations							
African American	—	—	14.4%	21.5%	25.7%	31.0%	20.8%
Hispanic/Latino	—	—	0.9%	1.9%	1.5%	2.1%	3.2%
Native American	—	—	2.3%	3.9%	3.8%	4.4%	1.4%
Asian	—	—	1.2%	2.8%	2.9%	1.8%	2.0%
Pregnant women	—	—	2.4%	2.2%	7.6%	11.6%	5.2%
Individual Cessation							
Number of individuals counseled	7	—	8,460	13,698	12,602	5,254	40,021
Number provided with cessation aids							
Any type	—	477	3,080	3,462	4,814	3,152	14,985
Patch	—	477	2,898	3,189	4,404	2,762	13,730
Zyban	—	0	170	151	120	176	617
Gum	—	0	12	122	290	214	638

— = No data available

3.1.2.6. Local Tobacco Program Perspectives

Both local Tobacco program coordinators and local health officers feel that their programs are accomplishing many of the goals that have been established for their programs. During in-depth interviews, they were asked to indicate what they think the highlights of their local Tobacco programs have been, and what impact their programs have had on their communities. The most common program highlight mentioned by coordinators and local health officers was that they have increased the number and types of cessation services offered in their communities, resulting in greater use of cessation resources among community members. Coordinators feel that they have built strong and able coalitions for their programs and that they have raised awareness about the health risks of tobacco in their communities. Most coordinators that indicated having an impact on cessation indicated that their CRFP funds enabled them to expand programs that already existed in their communities, many of which were solely cessation programs prior to the implementation of CRFP.

Many coordinators indicated that they have been able to build the levels of activism in their communities through their coalitions. This advocacy has lead to the ability to push forward local clean air, minimum distance, and product placement policies within their communities. According to local health officers, these activities were enabled by the strong relationships with and input provided by organizations and individuals in the communities, as well as the strong coalitions that have been built through the local Tobacco programs. Most programs that have local product placement policies in place believe that these policies reduce the availability of tobacco for youth.

Many coordinators and local health officers also indicated that the school-based funding has allowed them to reach more youth through the school systems. The integration of school curricula to reach and educate youth about tobacco and smoking was an important highlight for some local health officers. Some coordinators indicated that they do not think they would be able to reach as many youth without the schools on board, and that the curricula that they have established are very effective in reducing tobacco use among youth.

Most local coordinators and some local health officers indicated that they have been successful in reaching minorities in their communities through their programs. In part, this success has been attributed to the diversity of the local health coalitions and partnerships that have been forged within the faith-based communities.

A few coordinators specifically mentioned that their programs have reduced tobacco use prevalence in their communities. A few coordinators and several local health officers also mentioned that their programs have had an impact on enforcement in terms of raising compliance rates among businesses, involving youth in enforcement activities, and finding positive ways to use money that is collected through enforcement fines in their jurisdictions.

3.1.2.7. Tobacco-Related Outcomes: Review

Data from the 2000, 2002, and 2006 administrations of the MATS and MYTS were used to explore key tobacco outcome variables that can be compared over time to examine changes in prevalence trends and initiation/cessation patterns for adults and youth both statewide and by jurisdiction. To the extent possible, the potential impact of program activities on these trends is also explored. Even when outcomes can not be specifically linked to program activity data, changes in trends on tobacco prevalence, cessation and initiation variables can implicitly inform the impact of CRFP funding on statewide- and local-level tobacco outcomes. Results for Maryland youth and adults are addressed in separate sub-sections below.

Section 3.1.1 of this report described Maryland's progress on statewide tobacco goals related to reducing initiation and prevalence of tobacco use. Those analyses are not repeated here, but the reader is reminded of the following findings with respect to observed smoking and smokeless tobacco initiation and prevalence trends from 2000 to 2006:

- In 2002 and 2006, initiation of cigarette use, as measured by middle school and high school youth who indicated that they had ever smoked a whole cigarette, decreased significantly from the previous survey year. There was a 49.1% decrease in initiation of cigarette use among middle school students and a 38.0% decrease in initiation among high school students from 2000 to 2006.
- There were no changes over time in reported initiation of smokeless tobacco use ("ever used smokeless tobacco") by middle school students; and no net change from baseline to 2006 for high school students on this variable due to a significant decrease in initiation of smokeless tobacco use among high school youth between 2000 and 2002, and a significant increase in 2006.
- Current cigarette smoking prevalence among middle school and high school youth decreased significantly during each survey year from 2000 through 2006. Although adult current cigarette smoking prevalence declined from 2002 to 2006, this decrease was not significant. However, adult cigarette smoking prevalence was significantly lower in both 2002 and 2006 than it was at baseline.
- Current smokeless tobacco use among middle school youth has remained very low from 2000 through 2006, and showed a slight, but non-significant decline from 2002 to 2006. Although current smokeless tobacco use saw an increase among high school youth from 2000 to 2002, the prevalence decreased from 2002 to 2006. Prevalence of current smokeless tobacco use among adults remained at

approximately 1.0% across all years. A floor effect in prevalence among middle school youth and adults makes it unlikely that any observable changes will occur over time.

3.1.2.8. Undeage Youth Tobacco Outcomes: Prevalence Measures

Cigarettes. The percentage of current underage smokers among middle school and high school youth is presented in Table 3-13 for the 2000, 2002, and 2006 YTS samples. The CDC defines current smoking status as having smoked cigarettes on at least one out of the last 30 days. As indicated by non-overlapping confidence intervals, the steady declines observed across all study years appear to be significant for both middle school and high school students. From baseline (2000) to 2006, current smoking prevalence among middle school youth has been cut nearly in half (49%); among high schoolers, there has been a 36% reduction in prevalence from baseline to 2006. This variation in percent change in smoking prevalence across the middle school and high school groups is perhaps suggestive of more widespread effects of prevention efforts among the younger age groups, although due to differences in the size of the high school and middle school samples, the net effect of the rate changes (in terms of raw numbers) may be fairly equivalent. Alternatively, the variation in percent change could be explained by a higher likelihood of initiating smoking during the high school grades.

Table 3-13. Percent of Current Underage Smokers by Youth Population and Survey Year

Population	2000	2002	2006
Middle School	7.2 (6.3 – 8.1)	5.2 (4.7 – 5.7)	3.7 (3.2 – 4.3)
High School	23.0 (22.1 – 23.9)	18.7 (17.9 – 19.5)	14.7 (13.9 – 15.4)

As shown in Table 3-14, the reduction in current smoking trend holds for both males and females across both middle school and high school; as well as for minorities in both school groups. In all of these demographic groups, the degree of non-overlap in confidence intervals appears to indicate significant differences in current smoking rates from 2000 to 2002, 2002 to 2006, and from 2000 to 2006. There is some evidence that high school males are either more resistant to prevention efforts or more likely to initiate smoking behavior than the other school X gender groups: current smoking rates declined by 41% for middle school females, 41% for high school females, and 42% for middle school males, but declined by only 30% for high school males. Although a 30% reduction in prevalence of smoking is still a significant accomplishment, the State may want to further explore the risk and protective factors influencing the initiation or maintenance of smoking behaviors among high school males, and target prevention and/or cessation programs to better effect change in smoking rates among this group. For high school females, the trend in smoking rate has shifted from a 2000 prevalence rate that was actually higher than male smoking prevalence to a 2006 rate that was significantly lower than for high school males.

Table 3-14. Percent of Current Underage Smokers by Youth Population, Gender, and Survey Year

Population	Males			Females		
	2000	2002	2006	2000	2002	2006
Middle School	7.2 (6.0 – 8.4)	5.4 (4.7 – 6.1)	4.2 (3.4 – 4.9)	7.2 (6.1 – 8.3)	5.1 (4.4 – 5.7)	3.2 (2.6 – 3.8)
High School	22.4 (21.2 – 23.6)	18.4 (17.5 – 19.4)	15.6 (14.8 – 16.5)	23.4 (22.1 – 24.7)	18.7 (17.7 – 19.6)	13.7 (12.8 – 14.6)

Tables B-19 and B-20 in Appendix B show the middle school and high school current smoking prevalence rates over time by jurisdiction, as well as absolute and relative change in prevalence from baseline in 2000 to 2006. However, given the very small number of smokers in some of the jurisdictions, relative change data may not be consistently informative of meaningful jurisdiction differences. Additionally, three of the counties that demonstrate a lower percent change from the statewide change in smoking prevalence (Carroll, Montgomery, Prince George's) had significantly lower smoking rates than the state in 2000 to begin with, so this needs to be considered in interpreting the prevalence change variable. In 2000, several jurisdictions had significantly higher middle school prevalence rates than the

statewide rate. Examination of confidence intervals indicates that two counties (Caroline and Wicomico) had significantly higher middle school prevalence rates than the State as a whole in 2000, 2002, and 2006. While the prevalence rates in these jurisdictions was significantly higher each year than the corresponding state rates, the relative change in prevalence from 2000 to 2006 still shows a 47% reduction in middle school smoking rate for Wicomico County and a 45% reduction for Caroline County. Examination of confidence intervals indicates that the majority of jurisdictions show a pattern of non-significant changes in smoking rates from 2000 to 2002, but significant reductions from 2002 to 2006 and from 2000 to 2006. The trend of significant jurisdiction-level reductions in smoking rates since 2002 may reflect the impact of jurisdiction level programming from CRFP funds.

For the high school sample, nine jurisdictions (Alleghany, Calvert, Caroline, Cecil, Garrett, Kent, Kent, Talbot, Washington) demonstrate traditionally higher smoking prevalence rates than the state as a whole (i.e., significantly higher in all study years). Despite the traditionally higher smoking rates in these counties, the trends in high school smoking across time for *all* jurisdictions show desired decreases across the three MYTS administrations and, as shown by examination of confidence intervals, generally reveal significantly lower prevalence rates in 2006 vs. baseline.

Smokeless tobacco. Table 3-15 provides the percentage of middle school and high school youth currently using smokeless tobacco (i.e., use on at least one out of the last 30 days). Current use of smokeless tobacco is very low among middle school and high school youth overall (~2% and 5%, respectively) and has not changed significantly over time for either group. For middle school youth, the rate of smokeless tobacco use in Garrett County has been significantly higher than the state rate in 2000, 2002 and 2006. For high school youth, Alleghany, Frederick, Garrett, and Kent counties showed smokeless tobacco prevalence rates that were significantly higher than the state rates in 2000, 2002, and 2006. Even among these jurisdictions with more smokeless tobacco use, prevalence still decreased from baseline to 2006 for all of these jurisdictions except Frederick and Garrett counties. Smokeless tobacco use has increased among a few other counties as well; likely significantly so in Cecil and Talbot counties (See Tables B-21 and B-22 for jurisdiction-level data).

Table 3-15. Percent of Current Smokeless Tobacco Users by Youth Population and Survey Year

Population	2000	2002	2006
Middle School	2.1 (1.7 – 2.5)	2.1 (1.8 – 2.3)	1.9 (1.6 – 2.2)
High School	4.7 (4.3 – 5.1)	5.2 (4.8 – 5.6)	4.8 (4.4 – 5.2)

These data represent underage youth only

Other tobacco products. Since jurisdiction-level analyses of other tobacco products yielded suppression of several cells due to very low reported use of cigars, bidis, and kreteks, we examined other tobacco use beyond smokeless tobacco by looking solely at statewide youth prevalence of cigar smoking, and jurisdiction level trends for any tobacco use. Among middle school and high school youth, current cigar smoking has decreased over time, likely significantly so with each fielding of the MYTS survey since baseline:

- Prevalence of cigar smoking for middle school youth has gone from 4.6% at baseline (+/- 0.7% C.I.) to 3.5% in 2002 (+/- 0.4% C.I.) to 2.9% in 2006 (+/- 0.4% C.I.).
- Prevalence of cigar smoking for high school youth has gone from 12.5% at baseline (+/- 0.7% C.I.) to 11% in 2002 (+/- 0.6% C.I.) to 9.2% in 2006 (+/- 0.5% C.I.)

Table 3-16 provides statewide trend data for middle school and high school current use of any tobacco product. Statewide middle and high school youth tobacco use declined significantly from 2000 to 2006, from 2002 to 2006, and possibly from 2000 to 2002 as well (the confidence intervals overlap slightly for each group for the 2000 to 2002 comparison). As shown in Table B-23 in Appendix B, two jurisdictions

have been consistently higher than the state in middle school tobacco use prevalence in all MYTS administrations (Somerset County and Baltimore City). Table B-24 in Appendix B shows that several jurisdictions have demonstrated higher high school tobacco use prevalence rates than the state in all MYTS years (Alleghany, Caroline, Cecil, Garrett, Kent, Somerset, and Talbot counties). Even among the counties with traditionally higher prevalence rates, the trend in youth tobacco use prevalence has continued to decline over time. The majority of jurisdictions show significant changes since baseline in prevalence of any tobacco use among both middle and high school youth.

Table 3-16. Percent of Current Any Tobacco Users by Youth Population and Survey Year

Population	2000	2002	2006
Middle School	12.0 (10.5 – 13.5)	10.8 (9.9 – 11.7)	7.5 (6.6 – 8.3)
High School	24.9 (28.4 – 30.4)	27.7 (26.7 – 28.7)	21.6 (20.7 – 22.5)

These data represent underage youth only

3.1.2.9. Underage Youth Tobacco Outcomes: Initiation and Uptake Measures

Initiation of cigarette smoking. Initiation rates in Maryland for smoking among middle school youth have declined by 49% since baseline:

- In 2000, 16.7% of middle school youth reported ever smoking a whole cigarette (note: confidence interval not reported in the September 2003 report on Maryland tobacco surveys).
- In 2002, 11.7% of middle school youth reported ever smoking a whole cigarette (C.I. +/- 0.8).
- In 2006, the initiation rate for middle school youth dropped to 8.5% (C.I. +/- 1.0).

For Maryland high school youth, initiation rates have also steadily declined over time and demonstrate a 38% decline since baseline:

- In 2000, 43.4% of high school youth reported ever smoking a whole cigarette (note: confidence interval not reported in the September 2003 report on Maryland tobacco surveys).
- In 2002, 3.4% of high school youth reported ever smoking a whole cigarette. (C.I. +/- 0.9).
- In 2006, the initiation rate for high school youth dropped by 26.9% (C.I. +/- 1.0).

The reduction in youth smoking initiation rates represents a statistically significant change for each school group — at least from 2002 to 2006, and likely from 2000 to 2002 and 2000 to 2006 as well. Without confidence intervals for the 2000 point estimate, we can not be sure about comparisons involving that year.

There has also been a significant decline over time in the percent of youth reporting early smoking initiation (i.e., prior to age 11). Table 3-17 shows a reduction in the percent of youth who have ever tried cigarettes (even one or two puffs) that report having smoked their first whole cigarette prior to age 11. Examination of confidence intervals indicates a significant reduction in reported early initiation of smoking behaviors for both school groups for both 2000 to 2002 and 2000 to 2006. The stabilization of high school reported early initiation from 2002 to 2006 could be a function of the aging of the original middle school cohort—the population of 6th graders represented in the original 2000 baseline MYTS would, in 2006, have grown into the population of 12th graders represented in the 2006 MYTS administration. If prevention efforts have been effective, reported early initiation should stabilize over time as fewer new smokers initiate smoking each year and age of first use is likely delayed.

Table 3-17. Percent of Underage Youth Ever Tried Smoking and Were Early Initiators by Population and Survey Year

Population	2000	2002	2006
Middle School	28.5 (26.6 – 30.5)	23.2 (21.4 – 24.9)	20.8 (18.4 – 23.2)
High School	14.5 (13.6 – 15.4)	12.8 (12.1 – 13.5)	12.5 (11.8 – 13.2)

Smoking uptake scale. To further examine patterns associated with youth initiation of smoking behaviors, a smoking uptake scale was created from combinations of MYTS variables/responses. Categories of the scale and operational definitions of each category are provided in Table 3-18. Using the uptake scale in addition to smoking or initiation rates alone offers several analytic advantages. First, the smoking rates among middle school students are typically low and hence require greater statistical power to detect statistically significant differences in smoking rates. Smoking uptake scales utilize the whole sample and may yield statistically significant changes in meaningful categories (e.g., increase in the number of students closed to smoking). Second, changes in smoking rates can be considered an upstream effect of tobacco prevention programs, whereas the increase in the number of students who do not intend to smoke represents a more immediate effect of smoking prevention programs.

Table 3-18. Operational Definitions of the Smoking Uptake Categories

Category	Data-based operational definition
Not open to smoking youth	Respondents who had never tried a cigarette, not even a few puffs, and who answered “definitely not” to questions about smoking in the future: (1) Do you think you will smoke a cigarette at anytime during the next year; and (2) If one of your best friends offered you a cigarette, would you smoke it?
Open to smoking youth	Respondents who had never smoked, not even a few puffs, but who indicated that they might smoke in the future by answering “definitely yes,” “probably yes,” or “probably no” to the question about smoking in the future or if a best friend offered them a cigarette. This is similar to the definition used in defining the “open to smoking” group in <i>First Look Report 3</i> (Mowery, Brick, and Farrelly, 2000).
Prior experimenters	Respondents who had tried smoking in the past, but had not smoked in the past 30 days.
Early-stage smokers	Respondents who had smoked at least once in the past 30 days but who had either (1) smoked on less than 20 of the last 30 days or (2) smoked less than 100 cigarettes during their lifetime. Early Smokers are at high risk of becoming Established Smokers, since these persons have progressed to the experimenter stage (USDHHS, 1994).
Established smokers	Respondents who had smoked 20 or more of the past 30 days and who had smoked 100 or more cigarettes during their lifetime.

The smoking uptake categories are designed to be mutually exclusive. Thus, the cumulative frequency of respondents across all categories is 100%. Changes over time in the frequency of smoking uptake categories for middle and high school are presented in Figures 3-7 and 3-8, respectively. Chi-square statistics were calculated to determine whether there were significant differences in the smoking uptake distributions. Results are provided in Table 3-19. All chi-squares reached significance at the $p < .0001$ value. Although this is partially attributable to the large sample size, combined with the observed changes in prevalence over time and the graphical depiction of changes in uptake in Figures 3-7 and 3-8, these results support a changing distribution of youth smoking behaviors from baseline to present.

Figure 3- 7. Trends in Underage Middle School Youth Uptake Stages of Smoking

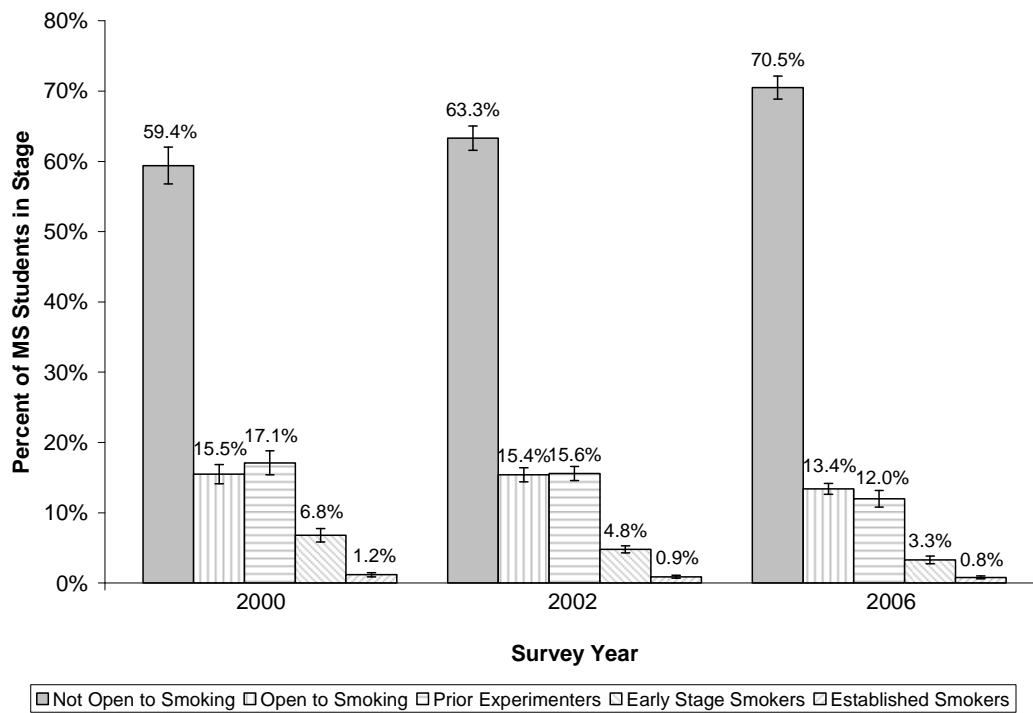


Figure 3-8. Trends in Underage High School Youth Uptake Stages of Smoking

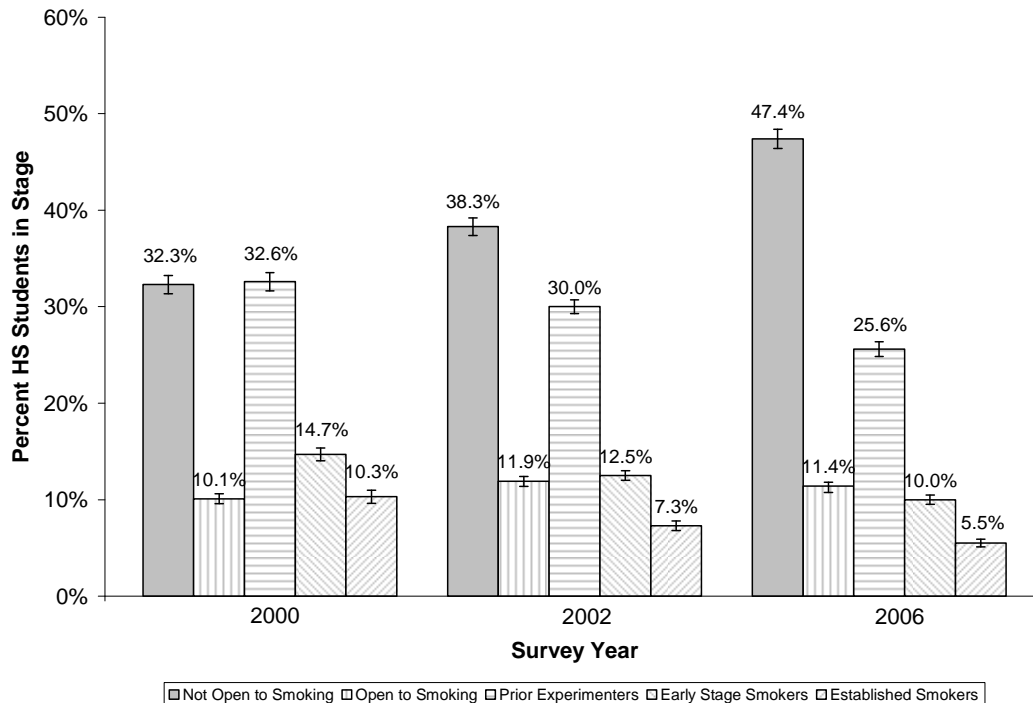


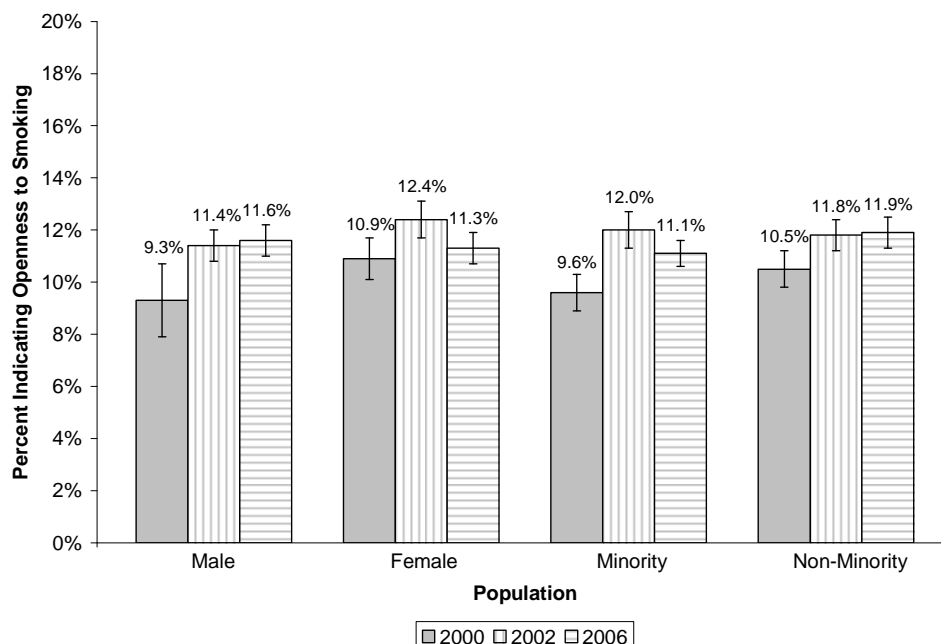
Table 3-19. Results of Chi-square Tests of Independence for Smoking Uptake Categories

Comparison	Middle School			High School		
	df	χ^2	p	df	χ^2	p
2000 to 2002	4	1010.13	0.0001	4	2979.71	0.0001
2002 to 2006	4	2255.98	0.0001	4	4128.34	0.0001
2000 to 2006	4	5635.44	0.0001	4	13417.13	0.0001

Confidence intervals were compared to examine the significance of the changes across time for each smoking uptake category. Statistically significant increases in the percentage of middle school and high school students “not open to smoking” were observed from baseline to 2002, 2002 to 2006, and baseline to 2006. Statistically significant decreases in the frequency of all other categories were observed for all compared years for middle school students (with the exception of floor effects observed in the “established smokers” category). For high school students, the expected significant decreases in frequency over time were observed for all categories except “open to smoking”. The results actually reveal statistically significant *increases* for high school students in openness to smoking for both baseline to 2002 and baseline to 2006. High school student openness to smoking did decrease significantly between 2002 and 2006, but has increased overall since baseline 2000.

Calculations of the smoking uptake scale for middle school and high school youth are tabulated by jurisdiction in Tables B-25 and B-26 in Appendix B. Many jurisdictions demonstrated the expected pattern of changes in uptake (i.e., significant increases in youth being closed to smoking and significant reductions in all other uptake categories). Wherever this did not hold true, it was nearly always attributable to increases in openness to smoking among certain jurisdictions. If the data are indicating a *real* increase in openness to smoking for the high school group, examination of gender and minority status reveals significantly different patterns of “openness to smoking” among the high school groups over time. The gender and minority patterns in openness to smoking are shown in Figure 3-9. By 2006, openness to smoking had converged for males/females and minorities/non-minorities, with each group demonstrating an overall increase since baseline (significant for all groups but females).

Figure 3-9. Gender and Minority Trends in Openness to Smoking among Underage High School Students



Stages of initiation. In keeping with previous work done by the Maryland Department of Health and Mental Hygiene (DiClemente, 2003) with the MYTS 2000 dataset, the MYTS 2006 data were used to classify Maryland youth into five stages of smoking initiation—Precontemplation, Contemplation, Preparation, Action, and Maintenance. The 2000 and 2006 distributions of middle school and high school youth on these stages of initiation were compared to determine whether there have been significant changes since the baseline tobacco study. DiClemente's earlier work with the 2000 data retained in the 2000 analysis all students under the age of 19, including 18-year olds. The DiClemente analysis of the 2000 data was also based on the *unweighted* MYTS data. To be consistent with the other youth tobacco analyses included in this Comprehensive Evaluation Report, the stages of initiation classifications for 2000 were re-run to both base the frequency of initiation stages on the *weighted* MYTS 2000 data, and to exclude 18-year olds. Youth are classified into the five stages of smoking initiation using four MYTS questions. The initiation stages are defined as follows (DiClemente, 2003):

- Precontemplation—Youth who are not currently smoking and are not planning on smoking within the next year.
- Contemplation—Youth who are not currently smoking and have some thoughts about smoking a cigarette in the next year.
- Preparation—Youth who have minimally tried cigarettes (less than 99 in their lifetime) who may be currently smoking (less than 5 days in the past 30) and definitely plan on smoking within the next year.
- Action—Youth who have smoked more than 6 cigarettes in their entire life, and have smoked 6 or more days during the past 30 days and have smoked for less than 6 months, and have expressed some probability of smoking a cigarette within the next year.
- Maintenance—Youth who have smoked more than 100 cigarettes in their entire life, smoked 6 or more days during the past 30 days, and have smoked for at least 6 months, and have some probability of smoking a cigarette within the next year.

Figure 3-10 depicts the 2000 and 2006 distributions of youth stages of smoking initiation for middle school and high school groups. As shown in the figure, the statewide distributions changed as expected from 2000 to 2006, with higher percentages of respondents classified as “Precontemplators” in 2006, and lower percentages of youth classified into the remaining (increasingly severe) initiation stages. These findings parallel the observed changes in smoking uptake scale distributions that were found in 2006 vs. baseline, and provide further evidence that youth smoking trends in Maryland are changing for the better. As will be discussed later, it is difficult to link these observed outcomes to program-level data that illustrate the direct impact of CRFP activities on smoking behaviors. But certainly the observed changes in outcomes for youth smoking prevalence and initiation are reflective of what would be expected if prevention efforts are working in the State of Maryland. Chi-squares were used to test for differences in the distributions of initiation stages in 2000 and 2006. Tests of independence reached the $p < .0001$ significance level for both the middle school and high school groups. Results are presented in Table 3-20. To remove the influence of sample size, the test was supplemented by Cramer's V, which confirmed that there is some association between study year and the distribution of youth stages of initiation.

Figure 3-10. Proportion of Underage Middle and High School Students in Each Stage of Initiation, 2002 and 2006

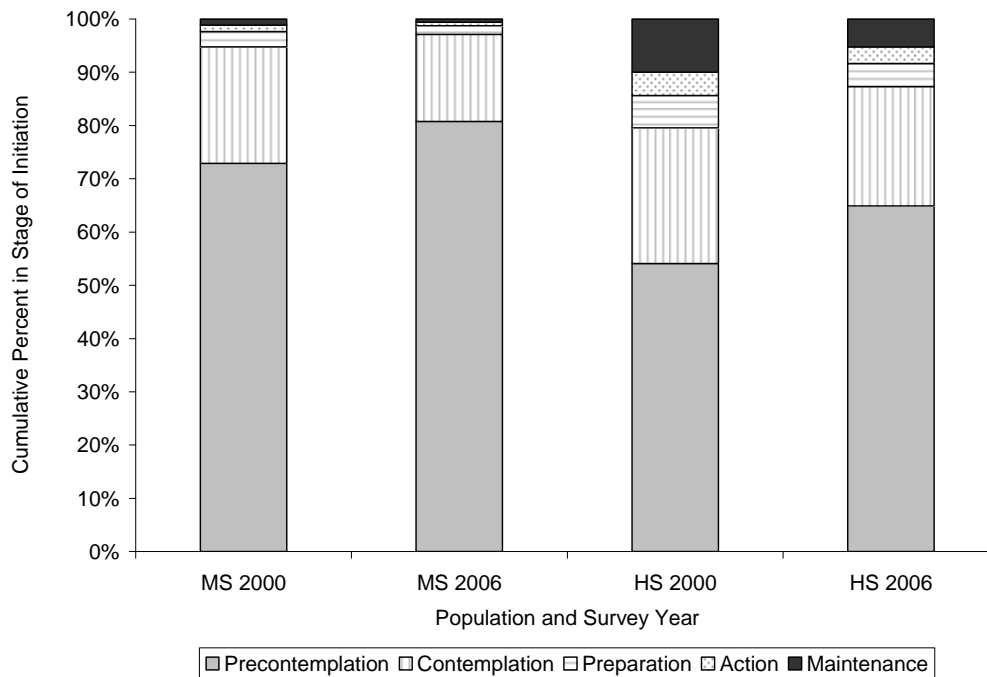


Table 3-20. Results of Chi-square Tests of Independence for Study Year and Stages of Initiation of Youth Smoking

	Middle School				High School			
Comparison	df	χ^2	P	Cramer's V	df	χ^2	p	Cramer's V
2000 to 2006	4	3474.24	0.0001	0.10	4	7270.81	0.0001	0.13

The percent of youth classified into each of the five stages of initiation (for 2000 and 2006) are presented by jurisdiction in Tables B-27 and B-28 in Appendix B for Middle School and High School youth, respectively. Jurisdiction-level changes in youth stages of initiation from 2000 to 2006 generally mirror the pattern found at the state level. Some jurisdictions show prevailing tendencies to have a more or less severe mix of youth initiation stages than the state as a whole, for example:

- Somerset County had a significantly higher percent of middle school youth in the “Action” stage in both 2000 and 2006, compared to the state rate. Despite this, the expected pattern of overall reduction of middle school youth in the Action and Maintenance stages was observed; as well as the expected increase from 2000 to 2006 in the percentage of middle school youth in the Precontemplation stage.
- Calvert, Caroline, Cecil, Frederick, Garrett, Harford, Kent, Queen Anne’s, Talbot, and Washington counties each had a significantly lower percentage of high school youth in the “Precontemplation” stage in both 2000 and 2006. Despite lower prevalence of the least severe initiation stage, these counties still demonstrated and increase from baseline in the percent of youth in the Precontemplation stage, and decreases from baseline in youth in the Action and Maintenance stages of initiation.
- Alleghany, Caroline, Somerset, Talbot, and Washington counties each had significantly higher percentages of high school youth in both the Action and Maintenance stages in both 2000 and 2006. Despite higher prevalence of the more severe initiation stages, these counties still demonstrated

decreases from baseline in the percent of youth in the Action and Maintenance stages; and increases from baseline in the percentage of youth in the Precontemplation stage.

Differences in the distributions of smoking initiation stages from baseline to 2006 were also examined by gender and minority status. Tables 3-21 and 3-22 provide the weighted frequencies, weighted percents, and 95% confidence intervals for these demographic groups for middle school and high school youth, respectively. The distribution of males and females classified into each of the five initiation categories did not differ significantly for middle school youth in either 2000 or 2006. The proportion of both middle school males and females classified as being in the “Precontemplation” stage of initiation increased as expected from baseline to 2006, with corresponding decreases in the other initiation stages.

Among the high school grades, males and females differed significantly at baseline in both the Precontemplation (significantly more high school males vs. females in the Precontemplation category at baseline) and Contemplation classifications (significantly more females vs. males in the Contemplation category at baseline). By 2006, the genders had reversed with respect to the Precontemplation category—there were now significantly more high school females vs. males classified as Precontemplators. Additionally, by 2006, significantly fewer high school females vs. males were classified as being in the Action and Maintenance stages of smoking initiation. Thus, although they seemed the more “at-risk” gender in 2000 in terms of the stages of initiation model, high school females clearly exhibited a less severe pattern in their distribution among the initiation stages in 2006 than did their male counterparts.

For minority status, the percentage of both minorities and non-minorities classified as in the Precontemplation stage increased in both middle school and high school youth from baseline to 2006, in keeping with the pattern observed in the state as a whole. The corresponding (and expected) 2000 to 2006 decreases in the percent of youth classified in all other initiation stages were also observed for both minorities and non-minorities. Although there were no differences in the distribution of initiation stages for middle school minorities and non-Hispanic Whites in 2000, by 2006 the percentage of minority middle school students classified as “Precontemplators” was significantly lower than for non-minority middle school students. Minority middle school youth in 2006 also showed significantly higher endorsement of the Contemplation and Preparation stages than did their non-minority counterparts.

At the high school level, minority youth at baseline showed significantly higher percentages of youth classified in the Precontemplation category as compared to non-Hispanic Whites; and significantly lower percentages of youth classified in the Action and Maintenance categories. These differences in the distribution of initiation stages for high school minorities and non-minorities also were shown in 2006, with the addition of significantly lower percentages of minority v. non-minority youth in the Preparation category as well.

One possible explanation for the more favorable patterns of distribution observed across the smoking initiation categories for females and minorities in 2006 (as compared to their male and non-minority counterparts) would be that perhaps programmatic efforts in Maryland have both targeted and differentially impacted the prevention of smoking initiation among girls and minority youth. It should be noted again that *all* demographic groups have shown the same general pattern of change in the distribution of smoking initiation stages from 2000 to 2006; and the change over time is in the favorable direction that would be expected if prevention efforts are successful (i.e., increases in the percent of youth classified in the “Precontemplation” stage and decreases in the percent of youth classified in the remaining initiation categories). But perhaps the results of the stages of initiation analysis reflect an even greater impact of jurisdictional prevention programming on minority and female youth.

Table 3-21. Middle School Stages of Initiation by Gender and Minority Status, 2000 and 2006

Demographic	Initiation Stage	2000		2006	
		Percent Weighted	Weighted Frequency	Percent Weighted	Weighted Frequency
Male	Precontemplation	71.8 (69.4 – 74.3)	65,703	79.9 (78.5 – 81.4)	74,741
	Contemplation	22.8 (20.6 – 25.0)	20,825	16.9 (15.6 – 18.1)	15,773
	Preparation	3.1 (2.6 – 3.6)	2,843	1.7 (1.3 – 2.1)	1,593
	Action	1.2 (0.8 – 1.5)	1,066	0.7 (0.5 – 0.9)	652
	Maintenance	1.1 (0.8 – 1.5)	1,032	0.8 (0.5 – 1.1)	742
	Total	100.0	91,469	100.0	93,500
Female	Precontemplation	73.9 (71.9 – 75.9)	64,897	81.7 (80.1 – 83.3)	74,197
	Contemplation	21.0 (19.4 – 22.7)	18,454	15.8 (14.4 – 17.1)	14,324
	Preparation	2.5 (2.0 – 3.1)	2,227	1.5 (1.2 – 1.8)	1,353
	Action	1.3 (0.9 – 1.7)	1,144	0.6 (0.3 – 0.8)	520
	Maintenance	1.2 (0.8 – 1.6)	1,063	0.5 (0.3 – 0.8)	425
	Total	100.0	87,785	100.0	90,819
Minority	Precontemplation	72.7 (70.7 – 74.7)	58,178	79.2 (77.4 – 81.1)	80,507
	Contemplation	22.8 (21.0 – 24.5)	18,227	17.8 (16.2 – 19.3)	18,037
	Preparation	2.9 (2.2 – 3.5)	2,285	1.9 (1.5 – 2.3)	1,927
	Action	1.0 (0.6 – 1.4)	799	0.6 (0.3 – 0.8)	582
	Maintenance	0.7 (0.4 – 1.0)	555	0.5 (0.3 – 0.8)	549
	Total	100.0	80,043	100.0	101,602
Non-minority	Precontemplation	73.1 (70.3 – 75.8)	72,044	82.6 (81.4 – 83.9)	67,996
	Contemplation	21.1 (19.1 – 23.2)	20,833	14.6 (13.6 – 15.6)	12,022
	Preparation	2.9 (2.1 – 3.6)	2,814	1.2 (1.0 – 1.5)	1,020
	Action	1.4 (1.1 – 1.7)	1,403	0.7 (0.5 – 0.9)	588
	Maintenance	1.5 (1.2 – 1.9)	1,528	0.8 (0.6 – 1.0)	666
	Total	100.0	98,623	100.0	82,293

Table 3-22. High School Stages of Initiation by Gender and Minority Status, 2000 and 2006

Demographic	Initiation Stage	2000		2006	
		Percent Weighted	Weighted Frequency	Percent Weighted	Weighted Frequency
Male	Precontemplation	55.5 (54.2 – 56.8)	58,186	63.7 (62.7 – 64.8)	76,193
	Contemplation	24.4 (23.4 – 25.4)	25,626	22.5 (21.6 – 23.4)	26,929
	Preparation	6.0 (5.3 – 6.6)	6,257	4.6 (4.3 – 5.0)	5,547
	Action	4.1 (3.6 – 4.5)	4,276	3.4 (3.1 – 3.8)	4,110
	Maintenance	10.0 (9.3 – 10.8)	10,512	5.7 (5.2 – 6.2)	6,788
	Total	100.0	104,856	100.0	119,566
Female	Precontemplation	52.7 (51.3 – 54.1)	55,671	66.1 (65.1 – 67.2)	81,650
	Contemplation	26.5 (25.4 – 27.6)	27,966	22.2 (21.6 – 22.9)	27,441
	Preparation	6.2 (5.6 – 6.7)	6,512	4.1 (3.7 – 4.4)	5,017
	Action	4.7 (4.2 – 5.2)	4,932	2.8 (2.5 – 3.1)	3,496
	Maintenance	10.0 (9.2 – 10.8)	10,550	4.8 (4.3 – 5.2)	5,882
	Total	100.0	105,631	100.0	123,485
Minority	Precontemplation	62.0 (60.5 – 63.4)	58,119	68.3 (67.2 – 69.4)	89,322
	Contemplation	24.3 (23.1 – 25.4)	22,771	22.4 (21.5 – 23.3)	29,255
	Preparation	5.7 (5.0 – 6.5)	5,355	3.7 (3.3 – 4.2)	4,899
	Action	3.0 (2.6 – 3.5)	2,843	2.4 (2.1 – 2.6)	3,086
	Maintenance	5.0 (4.5 – 5.6)	4,703	3.3 (2.9 – 3.6)	4,260
	Total	100.0	93,791	100.0	130,823
Non-minority	Precontemplation	47.8 (46.4 – 49.1)	55,587	60.9 (59.9 – 62.0)	68,160
	Contemplation	26.4 (25.3 – 27.5)	30,737	22.5 (21.7 – 23.2)	25,123
	Preparation	6.3 (5.8 – 6.8)	7,347	5.0 (4.7 – 5.4)	5,647
	Action	5.5 (5.0 – 5.9)	6,388	4.0 (3.7 – 4.3)	4,467
	Maintenance	14.0 (13.1 – 15.0)	16,347	7.6 (7.0 – 8.1)	8,453
	Total	100.0	116,406	100.0	111,850

3.1.2.10 Underage Youth Tobacco Outcomes: Secondhand Smoke Exposure and Beliefs about Secondhand Smoke

Changes in youth exposure to secondhand smoke from baseline (2000) to 2006 were examined by comparing the percent of middle school and high school youth that reported the following in each survey year:

- Riding in a car with someone smoking cigarettes on one or more days during the past week
- Being in the same room as someone smoking cigarettes on one or more days during the past week.

As shown in Figure 3-11 and Table 3-23, these two measures of exposure to secondhand smoke each showed a favorable trend, decreasing over time for both middle school and high school youth. The significantly higher percentages of high school students (vs. middle school students) exposed to secondhand smoke by riding in cars and being in the same room with someone smoking cigarettes is likely due to sharing transportation with and/or being around peers that are smoking cigarettes. Examination of confidence intervals indicates that secondhand smoke exposure, as measured by these variables, decreased significantly from 2000 to 2002, from 2002 to 2006, and from 2000 to 2006 for both middle school and high school groups.

Data shows that in 2006, youth in many jurisdictions more frequently indicated stronger endorsement of the belief that secondhand smoke is harmful, than was the case at baseline (See Tables B-29 and B-30 in Appendix B). The strengthening of youth beliefs about the harmful effects of secondhand smoke is more obvious for the middle school group, with about half of jurisdictions showing significant increases in the percentage of middle school youth holding this belief. Although most jurisdictions also demonstrate a rise in the percent of high school youth that definitely think secondhand smoke is harmful, most of these increases were not statistically significant.

Figure 3-11. Percent of Underage Youth Exposed to Secondhand Smoke by Population, Type of Exposure, and Year

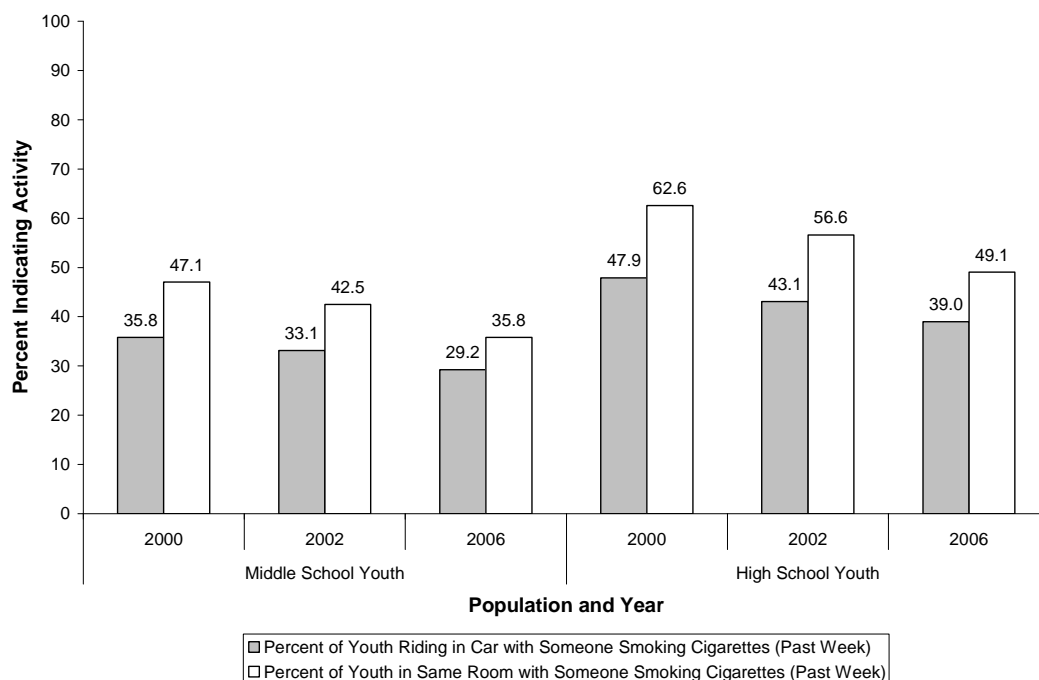


Table 3-23. Changes in Percent of Underage Youth that Think Secondhand Smoke is Harmful

	2000	2006
Middle School	63.1 (61.6 – 64.6)	70.9 (69.4 – 72.5)
High School	67.2 (66.2 – 68.3)	69.4 (68.3 – 70.4)

3.1.2.11. Underage Youth Tobacco Outcomes: Changes in Youth Attitudes about Smoking and Tobacco Use

Data trends were examined on four other attitudinal measures in the MYTS dataset to further explore changes since baseline in youth attitudes toward tobacco use and smoking. Tables B-31 and B-32 in Appendix B provide the percentages of middle school and high school youth endorsing the following beliefs in 2000 and 2006, as well as the associated relative percent change in these attitudes over time:

- Definitely think that young people risk harming themselves if they smoke 1-5 cigarettes per day,
- Definitely think tobacco is addictive like cocaine or heroin,
- Definitely think it is not safe to smoke 1-2 years as long as you quit after that,
- Definitely think that secondhand smoke is harmful, and
- Definitely think or probably think that smokers have more friends.

The percentage of respondents endorsing the above beliefs about smokers risking harm to themselves, the addictive quality of tobacco, and the harm caused by secondhand smoke (also reported above) generally increased in 2006 from baseline for both middle school and high school youth across most jurisdictions. These fairly global increases seem to imply that both age groups are increasingly comprehending and internalizing that smoking and tobacco use can have harmful physical consequences. However, there is wide variation among jurisdictions in the directionality of change on the other two attitude variables (i.e., not safe to smoke only 1-2 years; smokers have more friends). These questions may tap different underlying dimensions of beliefs about smoking (i.e., “short term smoking is not harmful”, “perceived social aspects of smoking behavior”) – something other than the “physical harm” component that the other three beliefs seem to have in common. The State may want to further explore the dimensionality of the attitude/ belief measures contained in the YTS (i.e., through cluster analysis, factor analysis, or another data reduction technique) because it is possible that different dimensions underlying the attitude measures may differentially predict tobacco outcomes for youth.

3.1.2.12. Adult Tobacco Outcomes: Prevalence Measures

Cigarettes. The percentage of Maryland adults estimated to be current cigarette smokers by the 2000, 2002, and 2006 ATS samples declined significantly from 17.5% (+/-1.1% C.I.) at baseline to 15.4% (+/-0.9 C.I.) in 2002, but seems to have stabilized between 2002 and the most current estimate of adult smoking prevalence, 14.8% (+/-0.8% C.I.) in 2006. Overall, the decline in smoking prevalence from 2000 to 2006 represents a 15.4% decline from the baseline rate.

Current smoking in the adult tobacco analyses was defined identically to the definition of current smoking for youth: smoking cigarettes on at least one out of the last 30 days. Although the CDC definition for current smoking also contains a qualifier that the adult smoking in the last 30 days must also have smoked 100 cigarettes or more in his or her lifetime to be considered a “current smoker”, Maryland has elected to retain a common definition of current smoking for youth and adults. The state hopes that this definition will better enable retention in the analytic datasets of young adults who are just initiating smoking, since

the state is legislatively mandated to report on the percentage of individuals who initiate smoking (or begin other tobacco use) within a specified time period (2 years) prior to each ATS survey administration.

Table 3-24, displays the smoking rates for adult males, females, and minorities for 2000, 2002, and 2006. Smoking rates for adult females were significantly lower than smoking rates for males in each study year. All three groups (males, females, minorities) showed favorable declines in current smoking over time. For each group, the declines were significant from 2000 to 2006, but not statistically significant from 2002 to 2006. Taken together with the statewide data, perhaps the stability in smoking rates in the later program years, coupled with significant declines in adult smoking in the early program years, are a function of greater commitment to smoking behaviors by adults vs. their underage counterparts. As time went on, the more stalwart adult smokers maintained their use of cigarettes, while those more likely to either give up or not initiate the behavior were affected by CRFP programming since the early years of the program. Overall, current smoking among males has declined 13% since baseline, while the prevalence of smoking among females and minorities has declined by 18% and 19%, respectively. For males and females, this change is mostly due to changes between 2000 and 2002 (declines in smoking rate of 11% and 13%, respectively); very little change in smoking rate has occurred for either group since 2002 (decline of only 2% for males 2002 to 2006; and 5% for females 2002 to 2006). For minorities, the declines in smoking rate has been more gradual—there was a 10% decline in smoking among minority adults from 2000 to 2002, and another decline of 10% from 2002 to 2006. This steady reduction in prevalence of minority smoking rates may be reflective of the programmatic efforts Maryland is targeting to minorities through the CRFP.

Table 3-24. Percent of Current Smokers by Adult Population

Population	2000	2002	2006
All Adults	17.5 (16.6 – 18.4)	15.4 (14.5 – 16.3)	14.8 (14.0 – 15.6)
Adult Males	19.5 (18.1 – 20.9)	17.4 (15.9 – 18.8)	17.0 (15.7 – 18.3)
Adult Females	15.7 (14.6 – 16.8)	13.6 (12.6 – 14.7)	12.9 (11.0 – 13.8)
Adult Minorities	18.5 (16.8 – 20.2)	16.6 (14.8 – 18.4)	14.9 (13.4 – 16.4)

Table B-33 in Appendix B shows the adult smoking prevalence rates over time by jurisdiction. Relative changes (2006 rate minus 2000 rate divided by 2000 rate) in adult smoking rates are also shown in the table. Two jurisdictions had significantly higher smoking rates for adults in all three survey years (Baltimore City and Cecil County). It is notable that despite this tradition of high smoking prevalence, the smoking rate in Baltimore City dropped significantly from baseline to 2006 (27% lower). The jurisdiction demonstrates one of the highest percent changes (since baseline) of any jurisdiction. Howard and Montgomery Counties have had smoking rates that are traditionally lower than the State, as demonstrated by significantly lower smoking rates on each survey year as compared to statewide smoking prevalence. Although several jurisdictions show a decline in smoking rates from 2000 to 2006, the decline was only statistically significant for Baltimore City, Charles County, and Queen Anne's County.

Other tobacco products. Since analyses of other tobacco use by demographic yielded suppression of several cells due to very low reported use of smokeless tobacco, cigars, pipes, bidis, and kreteks for various demographic sub-groups, we examined other tobacco use by looking solely at statewide adult prevalence of cigar smoking (and prevalence of cigar smoking for adult males), and jurisdiction-level trends for any tobacco use. Among adults, current cigar smoking has decreased significantly since baseline:

- Prevalence of cigar smoking for all adults was stable from 5.8% at baseline (+/- 0.5% C.I.) to 5.9% in 2002 (+/- 0.6% C.I.), but decreased significantly by 2006 to 5.1% (+/- 0.5% C.I.)

- Prevalence of cigar smoking for adult *males* was stable from 11.1% at baseline (+/- 1.1% C.I.) to 11.4% in 2002 (+/- 1.2% C.I.) to 9.7% in 2006 (+/- 1.0% C.I.).

Table B-34 in Appendix B provides trend data for current use of any tobacco product-- statewide and at the jurisdiction level. Statewide, adult tobacco use declined significantly from 2000 to 2006, from 2002 to 2006, and 2000 to 2006. Most jurisdictions show a steady decline in tobacco use rates over time. Jurisdictions showing a “spike” in tobacco use for 2002 generally saw the rates revert back to, or below, baseline rates in 2006. Only one county (Somerset) experienced a net increase in smoking prevalence from baseline to 2006. Somerset County was also among the jurisdictions with a higher prevalence of youth tobacco use, as compared to the state rates.

Table 3-25 displays the prevalence rates of any tobacco use for adult males, females, and minorities for 2000, 2002, and 2006. As with smoking, tobacco use rates for adult females were significantly lower than smoking rates for adult males in each study year. All three groups (males, females, minorities) showed favorable declines in current tobacco use over time. Overall, current tobacco use among males has declined 13% since baseline, while current tobacco use among females and minorities has declined by 19% and 16%, respectively.

Table 3-25. Percent of Current Adult Tobacco Users by Population and Survey Year

Population	2000	2002	2006
All Adults	21.8 (20.9 – 22.7)	19.8 (18.8 – 20.8)	18.5 (17.7 – 19.4)
Adult Males	27.7 (26.2 – 29.3)	26.2 (24.5 – 27.8)	24.2 (22.8 – 25.7)
Adult Females	16.5 (15.4 – 17.6)	14.3 (13.2 – 15.4)	13.4 (12.5 – 14.4)
Adult Minorities	20.6 (18.8 – 22.4)	19.1 (17.2 – 21.0)	17.3 (15.7 – 18.8)

3.1.2.13. Adult Tobacco Outcomes: Smoking Cessation Measures

The MATS data confirm that initiation rates of cigarette smoking among adults have not changed significantly over time:

- In 2000, 60.6% (+/- 2.7 C.I.) of all Maryland adults had smoked a cigarette (even 1-2 puffs).
- In 2002, 61.4% (+/- 3.1 C.I.) of all Maryland adults had smoked a cigarette (even 1-2 puffs).
- In 2000, 60.0% (+/-3.0 C.I.) of all Maryland adults had smoked a cigarette (even 1-2 puffs).

Thus, it seems that any observed changes in adult smoking prevalence is indeed more attributable to increases in cessation of the behavior among current smokers, as opposed to prevention of smoking initiation in prospective smokers. Adult intentions about quitting smoking, serious attempts by adults to quit smoking, and the success of those attempts to quit are explored next.

Intent to quit. Comparison of intent to quit items contained in the MATS are not possible across all three survey administrations due to question structure and response option changes in 2006. In 2006, the question was changed to a single item asked of current smokers with responses indicating “serious” intention of quitting within certain time frames (e.g., 30 days, 6 months, 12 months, 5 years, 5+ years, and an option for “not planning on quitting”). In previous survey years, the intent to quit measure was structured as two-items asked of current smokers: “planning” to quit in the next 30 days, followed-up by “seriously” planning to quit within 3 months, 6 months, 12 months, 5 years, 5+ years, and an option for “not planning on quitting.” Table 3-26 shows the frequency of current smokers in each study year who endorsed each of the response options. There were an unexpectedly high percentage of current smokers in 2000 and 2002 that reported an intention to quit in the next 30 days, likely indicative of social desirability. As shown in Table 3-26, the distribution of current smokers into the various intent to quit

time frames appears to potentially alleviate social desirability biasing the former question structure. Improvements in the intent to quit measures will help the state make more valid comparisons in subsequent administrations of the survey with respect to intention and attempts to quit, as well as successful quit attempts.

Table 3-26. Evidence of Potential Correction in Social Desirability of Responses to “Intent to Quit Smoking” Question Series

Survey Year	30 Days	3 Months	6 Months	12 Months	5 years or Less	After 5 Years	Not Planning to Quit
2000	31.4 (28.8-34.0)	8.7 (7.0-10.4)	8.1 (6.4-9.9)	11.5 (9.7-13.3)	10.9 (9.0-12.8)	4.1 (2.8-5.5)	23.9 (21.5-26.3)
2002	37.9 (34.7-16.3)	8.9 (6.9-11.0)	7.8 (5.9-9.7)	9.8 (7.8-11.7)	7.5 (6.0-9.0)	3.5 (2.4-4.6)	23.5 (20.7-26.2)
2006	18.8 (16.3-21.2)	14.5 (12.3-16.6)	11.3 (9.4-13.3)	14.5 (12.3-16.6)	14.7 (12.3-17.1)	7.6 (5.6-9.5)	18.7 (16.2-21.1)

Notes: Due to a change in the intent to quit measures, no data comparisons can be made over time

Attempts to quit. As shown in Table 3-27, the percentage of current smokers in Maryland who made a serious attempt to quit in the past 12-months (i.e., purposely quitting smoking cigarettes for one day or longer in the last year) *increased* from baseline to 2002, but *decreased* from 2002 to 2006 to levels at or below baseline quit attempts. This pattern held for demographic subgroups of males, females, and minorities. It may be that those smokers that were readily reachable by the program have been captured through program activities, resulting in the increase in attempts from baseline, and that the harder to reach smokers, who are less likely to attempt to quit smoking are accounting for the decrease noted from 2002 to 2006.

Table 3- 27. Attempts to Quit Smoking Cigarettes in the Past 12-Months by Year and Population

Survey Year	Males	Females	Minorities	Overall
2000	33.7 (30.0-37.5)	38.7 (35.0-42.3)	37.9 Not avail	36.1 (33.4-38.7)
2002	36.4 (32.0-40.9)	42.6 (38.3-47)	44.0 Not avail	39.4 (36.2-42.5)
2006	29.2 (25.3-33.2)	34.4 (30.6-38.1)	35.3 Not avail	31.6 (28.8-34.3)

Successful quit attempts. Table B-35 in Appendix B displays the percentage of Maryland smokers who both made a serious attempt to quit (as defined above), and were successful in their quit attempt (as implied by not being a current smoker at the time of the survey). Data are provided for Maryland adults statewide and by jurisdiction, although it should be cautioned that the unweighted frequencies of successful quit attempts in each jurisdiction were often very small ($n < 30$), especially at baseline. That said we have included the jurisdiction-level breakdown to broadly explore whether improved success rates are generally indicated. Successful quit rates have significantly improved statewide as compared to the rate of successful quit attempts at baseline. Similar improvements in the number of successful quit attempts were generally seen across jurisdictions. Although one jurisdiction (Wicomico) shows a 68% decline in the success rate of its adults that attempted to quit (from 24.2% in 2000 to 7.7% in 2006), caution should be exercised in interpreting this finding due to the very small actual unweighted frequencies of cases that comprise the cell (Wicomico County unweighted $n=12$ in 2000; unweighted $n=4$ in 2006).

Taken together, it appears that while attempts to quit are declining across the state, the likelihood of succeeding in an attempt to quit seems to be improving. Perhaps this is at least partially attributable to cessation support being provided by CRFP, including cessation aids and access to, and awareness of,

other cessation supports offered by the local Health Departments and the 1-800 Quit Line. To further examine this possibility, successful quit rates were compared for the group of individuals who attempted to quit in the last 12 months and indicated awareness about State help for cessation support, and the group of individuals who had attempted to quit in the last 12 months and were not aware of State help for cessation support. The success rates of quit attempts among these groups did not differ significantly, but was higher for the group of quit attempters that were aware of State cessation supports. We describe in the final section of the tobacco outcomes chapter one attempt to link program-level data regarding cessation aids offered with successful quit attempts and other data from the MATS survey.

3.1.2.14. Adult Tobacco Outcomes: Change in Adult Attitudes and Practices Concerning Secondhand Smoke

The cessation of adult smoking not only helps improve the physical health of the smoker; it can also significantly reduce the degree to which others, especially minor children that live with an adult smoker, are exposed to secondhand smoke. One indicator of youth exposure to secondhand smoke is the number of households that have both one or more minor children and an adult smoker living in the home. The MATS data indicate that the percent of such households in Maryland have steadily and significantly declined from 2000 to 2006:

- In 2000, 32.7% (+/- 1.9 C.I.) of households with minor children also had an adult smoker living in the home.
- In 2002, 29.8% (+/- 2.0 C.I.) of households with minor children also had an adult smoker living in the home.
- In 2006, 27.50% (+/-1.8 C.I.) of households with minor children also had an adult smoker living in the home.

This decrease is also observed in minority households with minor children and an adult smoker. The decrease was significantly different from baseline by 2006 (33.7% in 2000 vs. 29.4% in 2006; C.I.s = +/- 3.7 and +/- 3.0, respectively).

Youth are also safeguarded from secondhand smoke exposure when families implement rules prohibiting anyone from smoking inside the home (i.e., “home rules”). Table B-36 in Appendix B provides the percent of Maryland households that have established such rules about smoking inside the home. Data are provided for 2000, 2002, and 2006 for both the state as a whole and all jurisdictions. For the state and all jurisdictions, change is in the right direction, with all jurisdictions showing steady increases in the percent of households that prohibit smoking inside the home. As shown in Table 3-28, this general pattern also holds for both minority households and for homes in which there is a current smoker.

Table 3-28. Percent of Households with Rules against Smoking in the Home

Population	2000	2002	2006
All Households	64.9 (63.8 – 66.0)	70.1 (69.0 – 71.2)	77.8 (76.9 – 78.7)
Minority Households	65.5 (63.3 – 67.7)	69.7 (67.5 – 71.9)	78.3 (76.7 – 79.9)
Households with a smoker	39.3 (36.8 – 41.7)	46.8 (44.1 – 49.6)	54.7 (52.2 – 57.2)

Changes in adult beliefs about secondhand smoke are also evident from the analysis of MATS data. Table B-37 in Appendix B presents the percentage of Maryland adults who strongly agreed (in 2000 and 2006) that secondhand smoke is harmful to children. As shown in the table, nearly all jurisdictions exhibited some degree of positive change on the variable. Statewide in 2006, nearly 81% of adults endorsed this

belief; endorsement among the various jurisdictions ranged from a low of 74.8% (St. Mary's County) to a high of 84.6% (Prince George's County).

We describe in the following section one initial attempt to interrelate attitude data such as this with program level data available from the tobacco program database.

3.1.2.15. Tobacco Outcomes: Relationship to Program Activities Data

The emphasis of this Comprehensive Evaluation Report is principally to evaluate the impact of CRFP programming on the major tobacco outcomes of interest to the State. Although local programs report information about their activities and reach in the narrative portions of their quarterly and annual reports, they do not consistently set and monitor programmatic outcome goals of their activities, nor do they measure or monitor relevant desired outcomes of the consumers that they serve—neither at the individual consumer level (i.e., through customer surveys or follow-up), nor at the aggregate program level. In absence of specific program-level outcome data, we must restrict our evaluation of the effectiveness of CRFP programming on tobacco outcomes by looking at the broader community-level changes in tobacco use behaviors that presumably would be impacted if local programming is favorably impacting the community. Community-level tobacco outcomes, especially as measured by periodic statewide surveys, represent fairly distal, and probably *indirect* impacts of the effectiveness of local programs. To explore whether the program data currently collected by the jurisdictions can be utilized in any way to assess the more direct impacts of local programming on jurisdiction- and state-level tobacco outcomes, we explored the correlational relationships *at the jurisdiction level* among three sets of variables that could be used to characterize jurisdictions served by the local programs:

- the prevalence in the community of certain *attitudes* about tobacco use and secondhand smoke, as collected by the periodic administration of the MYTS and MATS;
- the *programmatic activities* conducted by the local programs since implementation, as measured by the process-oriented data currently collected by the local programs; and
- the observed *jurisdiction-level tobacco use behaviors* emerging from the analysis of the MYTS and MATS datasets.

Since the main focus of this report has been to determine, in effect, whether favorable *changes* in tobacco-related attitudes and behaviors have co-occurred with the implementation and operation of CRFP programs, we operationalized the attitude and behavioral outcome measures as *change measures*. The specific change variables used in this exploratory analysis were a jurisdiction's:

- Change in Middle School Tobacco Attitude Outcomes:
 - % Think secondhand smoke is harmful
 - % Think tobacco is addictive
 - % Think young people risk harm if they smoke 1-5 cigarettes/day
 - % Think young smokers have more friends
 - % Think it is not safe to smoke 1-2 years then quit
- Change in High School Tobacco Attitude Outcomes:

- Same variables as Middle School
- Change in Middle School Tobacco Behavior Outcomes:
 - % Current smokers
 - % Current tobacco users
 - % Youth in each of the five “stages of uptake”
 - % Initiating tobacco use (last two years)
- Change in High School Tobacco Behavior Outcomes:
 - Same variables as Middle School
- Change in Adult Tobacco Attitude Outcomes:
 - % Think secondhand smoke harms children
 - % With home rules on smoking that prohibit smoking in the home
- Change in Adult Tobacco Behavior Outcomes:
 - % Current smokers
 - % Current tobacco users
 - % Making serious attempt to quit in last 12 months
 - % Recent quitters in last 12 months
 - % Success rate of quit attempts last 12 months
- Program-level process measures included in the analysis were the cumulative counts (2000 to 2006) of:
 - Tobacco awareness programs implemented
 - Students attending school based programs
 - Attendees to community outreach activities
 - Community tobacco programs implemented
 - Pre-K students educated
 - Parents educated
 - Number of peer programs organized
 - Number of students reached by peer programs

Although we had planned to perform more sophisticated analyses based on the exploratory work, we first chose the simple correlational approach to determine the degree of association among the pairings of these variable types at the jurisdiction level. Three jurisdiction-level datasets (Middle School variables of interest, High School variables of interest and Adult variables of interest) were created containing 24 observations each—one for each of the jurisdictions. Correlational analyses were performed to examine the relationships between:

- Attitude-change measures and Behavioral-change measures,
- Attitude-change measures and Program-level process data, and
- Behavioral-change measures and Program-level process data.

Change variables were created by subtracting the value at baseline from the value in 2006. The “expected direction” of change is the direction that would be expected if a favorable trend was observed between 2000 and 2006 (e.g., reduction of smoking prevalence from 2000 to 2006 would result in a “negative” change due to ideally subtracting a larger value in 2000 from a smaller value in 2006). The directionality of correlations among change variables, then, need to be reviewed carefully to avoid potential misinterpretation.

No significant correlations were found among the program-level process measures and any of the outcome variables. We conclude that the kind of data currently collected by the jurisdictions is not the kind that is needed for determining programmatic impact on attitude change and changes in tobacco use behaviors. The current program-level data are limited to “counts” of activities and attendees, without any qualitative information about the purpose, delivery, intended audience, or content of the activities provided. If the CRFP wishes to evaluate the more proximal effects of programming on recipients of services provided by the programs, it may want to work with local programs to establish data collection and reporting activities that would allow for these analyses.

Significant correlations were found, however, among several youth attitude-change and youth behavior-change measures. The significant correlations are presented in Tables 3-29 and 3-30 for middle school and high school change variables, respectively. Correlations were retained in the tables as significant if $p \leq .01$. The main implications of the significant relationships are as follows:

- Changes in middle school attitudes about tobacco were associated with jurisdiction-level changes in middle school youth initiation and current smoking behaviors; while changes in high school youth attitudes about tobacco were associated with jurisdiction-level changes in high school current smoking and smoking establishment.
- Changes in youth beliefs about the addictive properties of tobacco had no relationship with jurisdictional-level changes in behaviors of middle school youth; however it was associated in expected directions with jurisdiction-level changes in current smoking for high school youth.
- Changes in youth attitudes about the risk of harm associated with smoking was a strong predictor of jurisdiction-level changes in current smoking prevalence.
- Jurisdiction-level changes in high school smoking behaviors are strongly predicted by changes in high school youth beliefs about the harmful effects of smoking and secondhand smoke.
- Changes in middle school youth attitudes about secondhand smoke are not predictive of changes in jurisdiction-level changes in middle school youth smoking behaviors.

Table 3-29. Correlation between Behavior Change and Attitude Change Variables – Middle School

Change in Behavior Outcomes	Significant Person-r at $p \leq .01$				
	* = desired direction; ^ = not desired direction; NS = not significant				
% Current smokers	NS	NS	-0.53174*	NS	NS
% Current tobacco users	NS	NS	-0.50513*	0.54577*	NS
% Not open to smoking	NS	NS	NS	-0.62485*	0.53101*
% Initiating tobacco use (last 2 years)	NS	NS	-0.50998*	0.6415*	-0.5004*
Change in Attitude Outcomes	% Think secondhand smoke is harmful	% Think tobacco is addictive	% Think young people risk harm if smoke 1-5 cigarettes per day	% Think young smokers have more friends	% Think it is not safe to smoke 1-2 years then quit

Table 3-30. Correlation between Behavior Change and Attitude Change Variables – High School

Change in Behavior Outcomes	Significant Person-r at $p \leq .01$				
	* = desired direction; ^ = not desired direction; NS = not significant				
% Current smokers	-0.63177*	-0.5017*	-0.70338*	NS	-0.60376*
% Current tobacco users	-0.68379*	NS	-0.59347*	NS	-0.58296*
% Not open to smoking	0.56146*	NS	0.62378*	-0.83638*	0.57002*
% Established smokers	-0.56156*	NS	-0.75348*	NS	-0.5648*
% Initiating tobacco use (last 2 years)	NS	NS	NS	NS	-0.5454*
Change in Attitude Outcomes	% Think secondhand smoke is harmful	% Think tobacco is addictive	% Think young people risk harm if smoke 1-5 cigarettes per day	% Think young smokers have more friends	% Think it is not safe to smoke 1-2 years then quit

3.1.2.16. Economic Impact of the Tobacco Program

For every individual who does not start smoking, or who quits smoking, there is a real impact on the economy of Maryland over the individual's lifetime. The purpose of the economic impact analysis is to estimate these cost savings for individuals in Maryland who avoid smoking. Ideally, the analysis would assess the cost savings to the individuals who stopped or did not start smoking as a result of the Cigarette Restitution Fund Program (CRFP) and, in so doing, estimate the program's economic impact. However, due to data limitations, the evaluation cannot attribute savings of smoking cessation to the CRFP. Rather, the economic analysis estimates Maryland's annual costs due to smoking in the following categories. See Appendix C for detailed explanation of the methodologies and definitions used.

Smoking-attributable medical expenditures. This refers to the value of the direct medical costs attributable to smoking-related medical conditions. These expenditures include:

- Smoking-attributable medical costs incurred by current and former smokers 18 years and above, and
- Smoking-attributable neonatal medical expenditures, or the excessive medical costs incurred by newborn infants whose mothers smoked during pregnancy.

Lost productivity. This refers to the value of economic output lost due to the fact that smokers have shorter life expectancies than non-smokers.

Value of potential years of life lost. Because people generally value longer life, shortened life expectancy poses additional costs to individuals and society above and beyond the cost of lost productivity. The value of potential years of life lost is estimated to capture this cost.

Overall, it is estimated that smoking costs Maryland over \$2.2 billion in adult medical expenditures and over \$3 million in neonatal medical expenditures annually. Further, the analysis estimates that \$967 million in adult medical expenditures and \$1.2 million in neonatal medical expenditures can be saved annually if smoking prevalence in Maryland is reduced to the target level set by the Maryland Health Improvement Plan 2000- 2010 (MDHMH, 2001). Added to the excessive medical cost of smoking are productivity loss and the value of potential years of life lost, which are estimated to be \$1.8 billion and \$10.6 billion each year, respectively. As such, the total annual cost of smoking exceeds \$14 billion.

Economic Impact: Smoking Attributable Medical Expenditures

The negative health consequence of smoking has long been established (USDHHS, 2004). Smoking has been found to increase the risks for 10 types of cancer, a broad category of cardiovascular diseases, respiratory diseases, and reproductive health effects. As a consequence, smokers incur higher medical expenditures when compared with nonsmokers. It has become increasingly clear that a large proportion of the annual personal health expenditures are exclusively attributable to smoking (Warner, Hodgson & Carroll, 1999). Such expenditures can be saved if current smokers stop smoking and potential smokers do not start smoking.

In this section, we present the estimates of annual excessive medical expenditures attributable to smoking for adults 18 years and older, and newborn infants. Estimated cost savings on medical expenditures from reduced smoking prevalence are also presented.

Adult smoking-attributable medical expenditures. Table 3-x presents Maryland's estimated annual medical expenditure attributable to smoking by type of care provided in 2004 for adults 18 years and older. As Table 3-31 shows, the total medical expenditures of Marylanders in 2004 in the five categories of care amounted to approximately \$26 billion, of which \$2.2 billion, or about 8.45%, was attributable to smoking. This is similar to the results derived using alternative methodologies.³

Table 3-31. Maryland Annual Smoking-Attributable Medical Expenditure for Population 18 Years and Older by Type of Care in 2004 (Million Dollars).

Type of Care	Total Medical Expenditures	Smoking-Attributable Fraction	Smoking-Attributable Medical Expenditures
Ambulatory	\$8,017	9.83%	\$788
Hospital	\$10,624	4.22%	\$448
Prescription Drugs	\$3,813	7.71%	\$294
Nursing Home	\$2,549	23.60%	\$602
Other	\$1,009	6.65%	\$67
Total	\$26,012		\$2,199

Source: Smoking-attributable fraction: SAMMEC at <http://apps.nccd.cdc.gov/sammecc/>.

Total medical expenditures were retrieved from National Health Expenditure Accounts at <http://www.cms.hhs.gov/NationalHealthExpendData/>.

Expenditures are presented in five care categories: ambulatory care, hospital care, prescription drugs, nursing home care, and other types of care. Other types of care include home health, nonprescription drugs, and nondurable medical products. Total medical expenditures in each category were multiplied by the smoking attributable fraction to obtain the smoking-attributable portion of the expenditures.

³ Two alternative methodologies have been used to compute smoking-attributable medical expenditures. Results of these alternative calculations are presented in Appendix B.

Figure 3-12 illustrates the smoking attributable medical expenditures in a graph. With \$788 million or 36%, ambulatory care accounts for the largest share of the cost. Nursing home is the second most costly type of care in terms of total smoking-attributable cost. Although the total expenditures on nursing homes for all Marylanders accounts for less than 10% of the total medical expenditures of these five categories, the smoking attributable cost of nursing homes accounts for more than 27% of the total smoking-attributable medical expenditures. This is due to a 23.6% smoking-attributable fraction for nursing home expenditures. In other words, in every dollar that we spend on nursing homes, 24 cents could have been avoided if there were no smokers.

**Figure 3-12. Maryland Smoking-Attributable Medical Expenditure by Type of Care in 2004
(Millions of Dollars)**

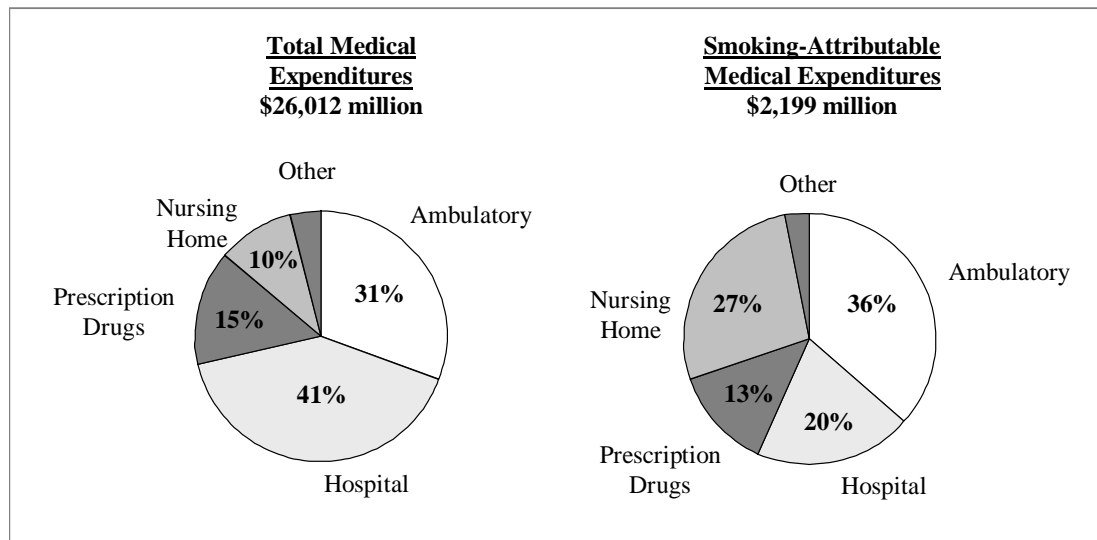


Table 3-32 presents the average annual medical cost per incidence of smoking-attributable disease. It was estimated that a total of 149,600 Maryland smokers suffered from 227,100 smoking-attributable conditions in 2000 (Hyland et al., 2003). Assuming that these numbers remain stable, we estimated that approximately \$14,699 was spent annually to treat every smoker with smoking-attributable health conditions. The annual cost of treating one smoking-attributable medical condition was \$9,683.

Table 3-32. Annual Smoking-Attributable Morbidity and Excessive Medical Expenditures

Estimated MD smoking-attributable medical expenditure	\$2,199 million
Number of people suffering from smoking attributable health conditions	149,600
Excessive medical expenditure per person suffering from smoking-attributable health conditions	\$14,699
Number of smoking-attributable health conditions	227,100
Excessive medical expenditure per smoking-attributable health conditions	\$9,683

Source: Number of smoking-attributable conditions and number of people suffering from these conditions were retrieved from Hyland et al., 2003

Neonatal medical expenditures attributable to smoking. While the costs related to treating smoking-attributable morbidity may incur many years after the individual started smoking, the medical cost of smoking by pregnant women can be seen in the very-short term. Infants have a lower average birthweight when their mother smoke during pregnancy. Infants with a low birthweight are at increased risk of neonatal morbidity and mortality (USDHHS, 2004).

Smoking prevalence among pregnant women in Maryland has been decreasing steadily since the turn of the 21st century. The percentage of pregnant women who smoked in Maryland decreased from 9.3% in 2000 to 6.9% in 2005, a 25% reduction over the short course of five years (MDHMH, 2006). However, even with the reduction in smoking prevalence, potential savings in neonatal medical expenditures would be achieved with further reductions.

Based on the smoking prevalence of 7.39% among pregnant women in Maryland in 2004, SAMMEC estimated a smoking-attributable fraction of 1.33%. In other words, 1.33% of the total neonatal medical expenditures in Maryland could have been saved if no pregnant women smoked.

Table 3-33 presents the total neonatal medical expenditures and smoking-attributable neonatal medical expenditures by primary payment sources. The total neonatal medical expenditures were multiplied by the smoking attributable fraction (SAF) of 1.33% to obtain the estimates of smoking-attributable medical expenditures. Over \$240 million was spent on neonatal medical care in 2004, of which \$3.2 million was attributable to smoking. Medicaid, including both HMO and non-HMO services, was the largest payer for neonatal medical care in the State, paying approximately 45% of the total cost. Medicaid's share of smoking-attributable neonatal expenditures amounted to approximately \$1.4 million in 2004. Because Maryland State government shares 50% of the cost of Medicaid, the annual cost of smoking attributable neonatal expenditures to the Maryland government is about \$0.7 million.

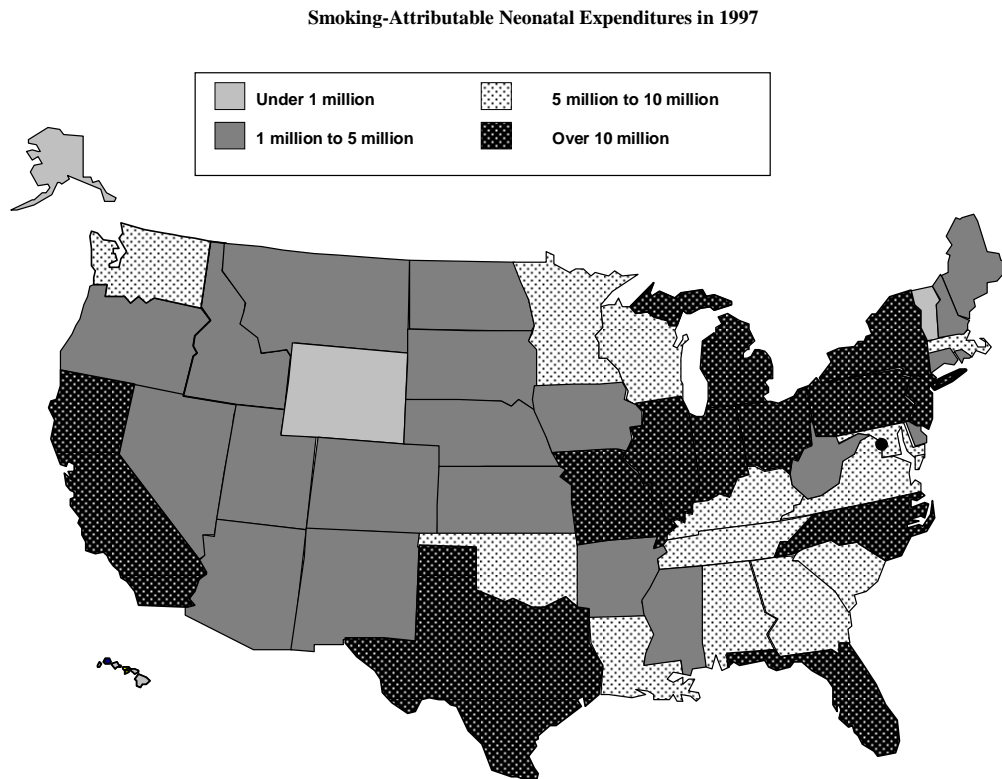
Table 3-33. Maryland Smoking-Attributable Neonatal Medical Expenditures in 2004 by Primary Payment Source.

Category	Total Neonatal Medical Expenditures	Smoking-Attributable Expenditures
Medicaid	\$30,502,963	\$405,689
Medicaid HMO	\$77,187,255	\$1,026,590
Medicare	\$99,099	\$1,318
Medicare HMO	\$3,880	\$52
Title V	\$8,351	\$111
Other Gov.	\$1,923,843	\$25,587
Blue Cross MD	\$23,872,351	\$317,502
Blue Cross NCA	\$7,990,380	\$106,272
Blue Cross Other	\$9,162,426	\$121,860
Commercial	\$27,880,358	\$370,809
HMO	\$58,618,827	\$779,630
Self Pay	\$2,466,572	\$32,805
Charity	\$11,506	\$153
Other	\$135,604	\$1,804
Unknown	\$452,538	\$6,019
Total	\$240,315,953	\$3,196,202

Note: Estimates based on a smoking prevalence of 7.39% among pregnant women and a smoking attributable fraction of 1.33% computed by SAMMEC.
Source: Smoking prevalence and expenditure data provided by Maryland Department of Health and Mental Hygiene. Statistics are compiled by the authors.

Figure 3-13 illustrates the smoking-attributable neonatal expenditures of Maryland compared with other states in the U.S. for the year 1997. The estimates were obtained through statistical models based on private sector claims data provided by the Medstat MarketScan database, and therefore, may not be comparable to the estimates of excessive neonatal medical expenditures presented in the previous section of this report (SAMMEC, 2001). However, the figure presents a picture of the environment and how Maryland compares to other states. As the figure shows, Maryland was among the states whose smoking-attributable neonatal medical expenditure was between \$5 million and \$10 million and ranked 20th among the 50 states and the District of Columbia. Its smoking prevalence among pregnant women (10.3% in 1997), however, ranked 10th and was considerably lower than the 50-state median of 14.1%.

Figure 3-13. National Comparison of Smoking-Attributable Neonatal Medical Expenditures

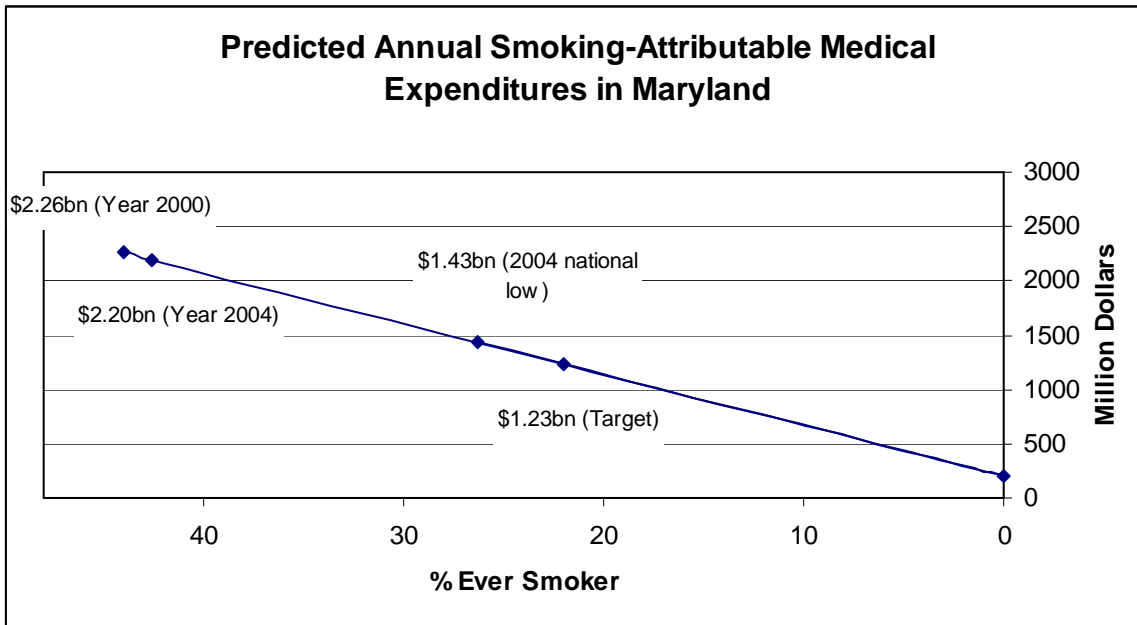


Source: SAMMEC 2001

Impact of reducing smoking prevalence on adult medical expenditure. In order to estimate the impact of reducing smoking prevalence on smoking-attributable medical expenditures, data on medical expenditures and smoking prevalence for all 50 states and the District of Columbia were examined. An econometric model was developed to predict the smoking-attributable medical expenditures based on varying smoking prevalence. Detailed discussions on the methodology and results of the regression analysis are available in Appendix C.

Figure 3-14 presents the predicted total annual smoking-attributable expenditures for Maryland. These expenditures include those for the five types of care discussed previously in this chapter, namely ambulatory care, hospital care, prescription drugs, nursing homes, and other types of care. As expected, smoking-attributable medical expenditure was found to be positively associated with smoking prevalence. Reducing the proportion of adults who smoke or smoked by one percentage point leads to a reduction of approximately \$48 million in annual medical expenditures. At the rate of 44.0% ever smokers in 2000, Maryland pays an annual bill of almost \$2.26 billion to treat smoking-attributable diseases. As of 2004, the proportion of Maryland adult population who ever smoked was 42.6%. At this rate, the annual smoking attributable medical expenditures are \$2.20 billion; approximately \$60 million lower than the 2000 level.

Figure 3-14. Predicted Maryland Annual Smoking-Attributable Medical Expenditures (Million Dollars)



Tables 3-34 and 3-35 show the excessive medical expenditures attributable to smoking if Maryland's smoking prevalence had been at the same level as the state with the highest prevalence rate and the national median, respectively. In the year 2004, the state of Maine had the highest percentage of ever smokers among all U.S. states and the District of Columbia. Approximately 52.2% of its residents were current or former smokers. If Maryland had a smoking prevalence as high as Maine, Maryland residents would incur an annual smoking-attributable medical expenditure of \$2.65 billion. This is \$451 million higher than Maryland's actual medical cost of smoking. In 2004, the percentage of ever smokers in Maryland (42.6%) was slightly lower than the national median of 45.3%. However, even increasing the percentage of ever smokers by a meager 2.7 percentage points will increase statewide medical expenditure by \$127 million annually.

Table 3-34. Impact of Increasing Smoking Prevalence to the Level of the State with the Highest Smoking Prevalence in 2004

	2004 Actual Prevalence		National High		Economic Impact (Million Dollars)
	% Ever Smoker	Expenditures (Million Dollars)	% Ever Smoker	Expenditures (Million Dollars)	
Ambulatory	42.6%	\$788	52.2%	\$947	\$159
Hospital		\$448		\$534	\$86
Prescription Drugs		\$294		\$365	\$71
Nursing Home		\$602		\$699	\$97
Other		\$67		\$104	\$37
Total		\$2,199		\$2,650	\$451

Table 3-35. Impact of Increasing Smoking prevalence to the Level of the National Median in 2004

	2004 Actual Prevalence		National Median		Economic Impact (Million Dollars)
	% Ever Smoker	Expenditures (Million Dollars)	% Ever Smoker	Expenditures (Million Dollars)	
Ambulatory	42.6%	\$788	45.3%	\$833	\$45
Hospital		\$448		\$472	\$24
Prescription Drugs		\$294		\$314	\$20

	2004 Actual Prevalence		National Median		Economic Impact (Million Dollars)
	% Ever Smoker	Expenditures (Million Dollars)	% Ever Smoker	Expenditures (Million Dollars)	
Nursing Home		\$602		\$629	\$27
Other		\$67		\$78	\$10
Total		\$2,199		\$2,325	\$127

Compared with the average state and states with highest smoking prevalence, Maryland has been paying fewer dollars in smoking-attributable medical expenditure. However, great additional savings can be realized if the smoking prevalence can be reduced further. According to the Maryland Health Improvement Plan 2000-2010, one of the objectives for programs receiving funds from the CRFP is to reduce tobacco use among adults by 50% from the 2000 base rate (MDHMH, 2001). As shown in Figure 3-14, if Maryland's smoking prevalence is reduced to this target level, the annual medical expenditures attributable to smoking will almost be halved to \$1.2 billion. Table 3-36 provides estimates of impact on medical expenditures if smoking prevalence reaches 22%. Maryland will save \$967 million annually if the smoking prevalence is reduced to this level.

One note of caution concerns the fact that the percentage of ever smokers will not change by a big margin in the short term even if current smoking prevalence decreases dramatically. Therefore, the \$967 million annual savings in medical expenditures will only be realized if the current smoking prevalence is reduced by 50% and stays at that level for a prolonged period of time. Indeed, most savings in medical expenditures will not be realized immediately after the individual quits smoking, as many smoking-related diseases develop late in an individual's life cycle.

Table 3-36. Impact of Reducing Smoking prevalence to Maryland Health Improvement Plan Target

	2004 Actual Prevalence		Target Prevalence		Economic Impact (Million Dollars)
	% Ever Smoker	Expenditures (Million Dollars)	% Ever Smoker	Expenditures (Million Dollars)	
Ambulatory	42.6%	\$788	22.0%	\$446	-\$341
Hospital		\$448		\$264	-\$184
Prescription Drugs		\$294		\$141	-\$153
Nursing Home		\$602		\$383	-\$208
Other		\$67		0*	-\$67
Total		\$2,199		\$1,232	-\$967

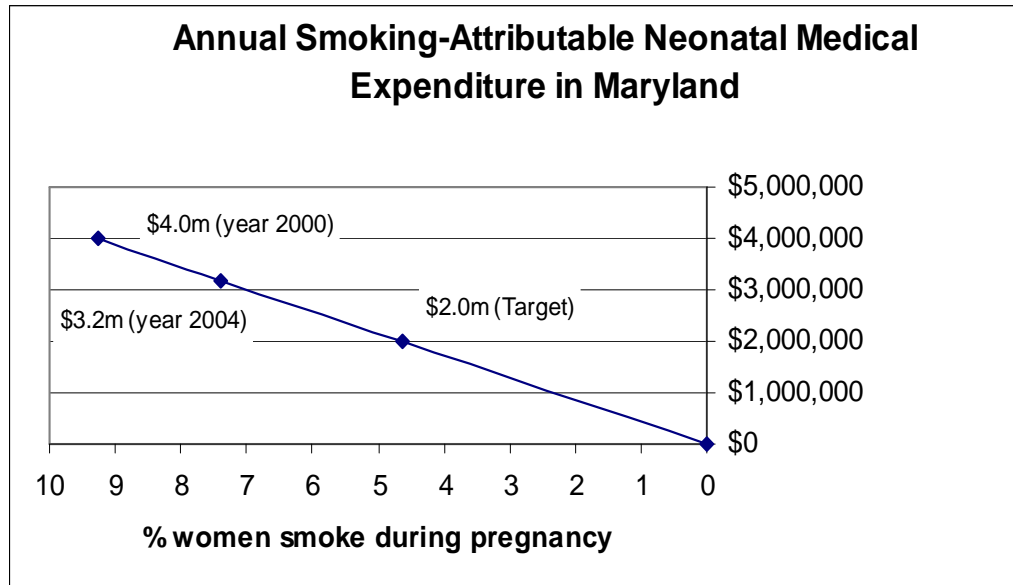
Figure 3-14 also shows the predicted medical expenditure if Maryland's smoking prevalence has been at the same level as the state of Utah, which had the lowest percentage of current and former smokers in 2004. Table 3-37 presents the economic impact if Maryland's smoking prevalence is reduced to that level (23.6%). Decreasing the percentage of ever smokers among the population to 26.3% would lead to an annual saving of \$766 million in adult medical expenditures.

Table 3-37. Impact of Reducing Smoking Prevalence to the Level of the State with the Lowest Smoking Prevalence in 2004

	2004 Actual Prevalence		National Low		Economic Impact (Million Dollars)
	% Ever Smoker	Expenditures (Million Dollars)	% Ever Smoker	Expenditures (Million Dollars)	
Ambulatory	42.6%	\$788	26.3%	\$517	-\$271
Hospital		\$448		\$302	-\$146
Prescription Drugs		\$294		\$173	-\$121
Nursing Home		\$602		\$437	-\$165
Other		\$67		\$4	-\$63
Total		\$2,199		\$1,434	-\$765

Impact of reducing smoking among pregnant women on neonatal medical expenditures. Based on the smoking-attributable fractions computed by SAMMEC, we computed smoking-attributable neonatal medical expenditures at different levels of smoking prevalence for pregnant women. Figure 3-15 shows the relationship between excessive neonatal medical expenditure and the proportion of women who smoke during pregnancy. For each percentage decrease of smoking prevalence among pregnant women, we save approximately \$432,000 annually in neonatal medical costs. Medicaid will save about \$193,500, of which the State's share is \$96,750.

Figure 3-15. Impact of Reducing or Increasing Smoking Prevalence during Pregnancy on Annual Smoking-Attributable Neonatal Medical expenditures in Maryland



As shown in Figure 3-15, the decrease of smoking prevalence among pregnant women from 9.27% to 7.39% has led to an annual saving of approximately \$800,000. Further, the Maryland Health Improvement Plan 2000-2010 made it an objective to reduce the proportion of women who use tobacco products during pregnancy by 50% from the 2000 base (MDHMH, 2001). This means a reduction of 4.64 percentage points from the 2000 level. Great savings can be achieved if the smoking prevalence among pregnant women reaches the target level. As indicated in Table 3-38, reducing the smoking prevalence from 7.39% to 4.64% would result in an immediate annual cost saving of \$1.2 million in neonatal medical expenditure. Approximately 45% or \$538,000 would be saved by Medicaid. The State's share of the saving is \$269,000 annually.

Table 3-38. Impact of Reducing Smoking Prevalence on Neonatal Medical Expenditures

	2004 Actual Prevalence		Target Prevalence		Economic Impact
	Prevalence	Expenditures	Prevalence	Expenditures	
Medicaid	7.39%	\$405,689	4.64%	\$253,175	\$152,515
Medicaid HMO		\$1,026,590		\$640,654	\$385,936
Medicare		\$1,318		\$823	\$495
Medicare HMO		\$52		\$32	\$19
Title V		\$111		\$69	\$42
Other Gov.		\$25,587		\$15,968	\$9,619
Blue Cross MD		\$317,502		\$198,141	\$119,362
Blue Cross NCA		\$106,272		\$66,320	\$39,952
Blue Cross Other		\$121,860		\$76,048	\$45,812
Commercial		\$370,809		\$231,407	\$139,402
HMO		\$779,630		\$486,536	\$293,094

	2004 Actual Prevalence		Target Prevalence		Economic Impact
	Prevalence	Expenditures	Prevalence	Expenditures	
Self Pay		\$32,805		\$20,473	\$12,333
Charity		\$153		\$95	\$58
Other		\$1,804		\$1,126	\$678
Unknown		\$6,019		\$3,756	\$2,263
Total		\$3,196,202		\$1,994,622	\$1,201,580

Note: The 2004 estimates are based on a smoking prevalence of 7.39% among pregnant women and a smoking attributable fraction (SAF) of 1.33% computed by SAMMEC. The expenditures related to the target prevalence are based on a smoking prevalence of 4.64% and an SAF of 0.83% computed by SAMMEC.

Source: Smoking prevalence and expenditure data were provided by Maryland Department of Health and Mental Hygiene. Statistics are compiled by the authors.

Economic Impact: Smoking Attributable Years of Potential Life Lost

Due to the many negative health consequences of smoking, smokers tend to have a shorter life expectancy than nonsmokers with comparable characteristics. The mortality effects of smoking have been found to have led to more preventable premature deaths in the world than any other cause (Sloan et al., 2004).

We estimated smoking-attributable years of potential life lost (YPLL) using the SAMMEC models. Columns two, four, and six of Table 3-39 present the annual smoking-attributable YPLL by sex and type of disease for adults 35 years and older. As expected, smoking claimed more life years among males than females. Approximately 50% of the YPLL are lost due to higher risks of malignant neoplasms among smokers as compared with non-smokers. In total, smoking reduces 106,000 years of potential life annually for Maryland residents.

Columns three, five, and seven of Table 3-37 present the estimated value of YPLL. Although a large amount of literature has been written to put a monetary value on a statistical life, a consensus of the estimate is yet to emerge (Sloan et al., 2004). After surveying relevant literature, Sloan used a value of \$100,000 per life year lost, and stated that this was a conservative estimate (Sloan et al., 2004). We based our estimates on the same assumption. The annual smoking-attributable cost of YPLL amounts to a total of \$6.1 billion for males and \$4.5 billion for females.

Table 3-39. Estimated Value of Years of Potential Life Lost due to Smoking by Type of Disease

Disease Category	Male		Female		Total	
	Years of Potential Life Lost	Smoking-Attributable Cost	Years of Potential Life Lost	Smoking-Attributable Cost	Years of Potential Life Lost	Smoking-Attributable Cost
Malignant Neoplasms						
Lip, Oral Cavity, Pharynx	1,518	\$151,800,000	354	\$35,400,000	1,872	\$187,200,000
Esophagus	2,266	\$226,600,000	482	\$48,200,000	2,748	\$274,800,000
Stomach	525	\$52,500,000	202	\$20,200,000	727	\$72,700,000
Pancreas	1,034	\$103,400,000	1,312	\$131,200,000	2,346	\$234,600,000
Larynx	894	\$89,400,000	128	\$12,800,000	1,022	\$102,200,000
Trachea, Lung, Bronchus	22,614	\$2,261,400,000	16,901	\$1,690,100,000	39,515	\$3,951,500,000
Cervix Uteri	0	\$0	210	\$21,000,000	210	\$21,000,000
Kidney and Renal Pelvis	803	\$80,300,000	24	\$2,400,000	827	\$82,700,000
Urinary Bladder	804	\$80,400,000	264	\$26,400,000	1,068	\$106,800,000
Acute Myeloid Leukemia	218	\$21,800,000	78	\$7,800,000	296	\$29,600,000
Sub-total	30,676	\$3,067,600,000	19,955	\$1,995,500,000	50,631	\$5,063,100,000
Cardiovascular Diseases						
Ischemic Heart Disease	14,708	\$1,470,800,000	8,180	\$818,000,000	22,888	\$2,288,800,000
Other Heart Disease	2,688	\$268,800,000	1,604	\$160,400,000	4,292	\$429,200,000
Cerebrovascular Disease	2,665	\$266,500,000	2,430	\$243,000,000	5,095	\$509,500,000
Atherosclerosis	173	\$17,300,000	40	\$4,000,000	213	\$21,300,000
Aortic Aneurysm	1,197	\$119,700,000	730	\$73,000,000	1,927	\$192,700,000
Other Arterial Disease	116	\$11,600,000	122	\$12,200,000	238	\$23,800,000
Sub-total	21,547	\$2,154,700,000	13,106	\$1,310,600,000	34,653	\$3,465,300,000
Respiratory Diseases						
Pneumonia, Influenza	1,410	\$141,000,000	964	\$96,400,000	2,374	\$237,400,000

Disease Category	Male		Female		Total	
	Years of Potential Life Lost	Smoking-Attributable Cost	Years of Potential Life Lost	Smoking-Attributable Cost	Years of Potential Life Lost	Smoking-Attributable Cost
Bronchitis, Emphysema	1,059	\$105,900,000	1,360	\$136,000,000	2,419	\$241,900,000
Chronic Airway Obstruction	6,790	\$679,000,000	9,130	\$913,000,000	15,920	\$1,592,000,000
Sub-total	9,259	\$925,900,000	11,454	\$1,145,400,000	20,713	\$2,071,300,000
Total	61,482	\$6,148,200,000	44,515	\$4,451,500,000	105,997	\$10,599,700,000

Note: 1. Smoking-attributable years of potential life lost was computed using SAMMEC available at <http://apps.nccd.cdc.gov/sammeec/>.

2. Value is based on \$100,000 per life year.

3. Cost among adults 35 years and older.

Economic Impact: Smoking Attributable Loss of Productivity

Because smokers tend to have shorter life expectancies than non-smokers, smokers have shorter work life than nonsmokers. Shorter life results in fewer years working, early retirement, and lost wages and economic output (US Department of Treasury, 1998). Table 3-40 presents the estimated annual smoking-attributable loss of productivity by sex and disease type estimated in Maryland using SAMMEC. The annual cost of smoking reflected in loss of productivity for Maryland totals \$1.8 billion, of which \$1.2 billion of loss is attributable to male smokers, and \$0.6 billion of loss is attributable to female smokers. Productivity loss is higher for males than females even though SAMMEC uses the same present value of future productivity for males and females. The gap in productivity loss between male and female partly reflects the higher smoking prevalence among males. Because the SAMMEC model does not include loss of productivity due to early retirement and lower productivity of smokers who work, this can be considered a conservative estimate of smoking-attributable productivity loss.

Table 3-40. Maryland smoking-attributable productivity loss by types of disease in year 2004

Disease Category	Male	Female	Total
Malignant Neoplasms			
Lip, Oral Cavity, Pharynx	\$36,609,000	\$6,582,000	\$43,191,000
Esophagus	\$46,258,000	\$7,605,000	\$53,863,000
Stomach	\$11,439,000	\$2,980,000	\$14,419,000
Pancreas	\$21,331,000	\$19,263,000	\$40,594,000
Larynx	\$16,965,000	\$2,513,000	\$19,478,000
Trachea, Lung, Bronchus	\$431,476,000	\$274,011,000	\$705,487,000
Cervix Uteri	\$0	\$4,792,000	\$4,792,000
Kidney and Renal Pelvis	\$14,746,000	\$442,000	\$15,188,000
Urinary Bladder	\$10,509,000	\$2,495,000	\$13,004,000
Acute Myeloid Leukemia	\$4,174,000	\$768,000	\$4,942,000
Sub-total	\$593,507,000	\$321,451,000	\$914,958,000
Cardiovascular Diseases			
Ischemic Heart Disease	\$320,269,000	\$115,948,000	\$436,217,000
Other Heart Disease	\$52,559,000	\$19,379,000	\$71,938,000
Cerebrovascular Disease	\$59,066,000	\$44,243,000	\$103,309,000
Atherosclerosis	\$2,583,000	\$0	\$2,583,000
Aortic Aneurysm	\$24,089,000	\$10,070,000	\$34,159,000
Other Arterial Disease	\$1,556,000	\$612,000	\$2,168,000
Sub-total	\$460,122,000	\$190,252,000	\$650,374,000
Respiratory Diseases			
Pneumonia, Influenza	\$22,080,000	\$10,146,000	\$32,226,000
Bronchitis, Emphysema	\$15,652,000	\$14,751,000	\$30,403,000
Chronic Airway Obstruction	\$85,201,000	\$89,779,000	\$174,980,000
Sub-total	\$122,933,000	\$114,676,000	\$237,609,000
Total	\$1,176,562,000	\$626,379,000	\$1,802,941,000

Note: Among adults 35 years and older

Economic Impact: The Cost of Smoking in Maryland

Table 3-41 summarizes the annual smoking-attributable costs of Maryland. Almost \$2.2 billion medical care cost is spent on smoking-attributable morbidity annually. Furthermore, approximately \$3.2 million is spent on treating neonatal health conditions because the mother of the child smoked during pregnancy. If Maryland reaches the tobacco-related goals set in the Maryland Health Improvement Plan 2000-2010 by reducing smoking prevalence to 50% of the 2000 level, Maryland will save \$967 million annually in adult health expenditures and an additional \$1.2 million annually in neonatal medical expenditures.

Additionally, the value of potential years of life lost due to smoking each year exceeds \$10 billion. An additional \$1.8 billion economic output is lost due to the fact that smokers tend to die younger than nonsmokers. The total annual cost of smoking in Maryland is over \$14.6 billion.

Table 3-41. Summary of Smoking-Attributable Costs

Type of Cost	Annual Smoking-Attributable Cost
Adult Medical Expense	\$2,199,048,700
Neo-natal Medical Expense	\$3,196,202
Value of Potential Years of Life Lost	\$10,599,700,000
Productivity Loss	\$1,802,941,000
Total Cost	\$14,604,885,902

The potential savings in smoking-attributable costs is tremendous compared with the funding of CRFP. Since the inception of CRFP, 2003 was the year with the highest level of funding with \$20.2 million invested in the Tobacco Program. This represents only two thirds of the CDC-recommended annual funding for a comprehensive tobacco program (\$30.3 million), and approximately 0.1% of the annual cost of smoking in Maryland. The annual cost of smoking-attributable medical expenditures alone is more than 100 times as high as the CRFP annual tobacco funding. If Maryland reaches the target smoking prevalence rate set by the Maryland Health Improvement Plan 2000-2010, the total annual savings in adult and neonatal medical expenditures are 48 times as much as the funding level of CRFP tobacco program in 2003 and 32 times as much as the funding level recommended by CDC for a comprehensive tobacco program, although the majority of these cost savings will be realized in the long term. Given our estimate that a one percentage point decrease in the proportion of population that have ever smoked would lead to \$48 million annual savings in adult medical expenditures, CRFP will be cost effective in the long term if, at its current funding level, it can reduce the proportion of population that ever smoked by half of a percentage point in a one-year period even if we only consider savings in adult medical costs. Only considering savings in adult medical expenditures, at the level of \$30.3 million annual funding recommended by CDC, CRFP will only need to reduce the proportion of ever smokers by approximately 0.63 percentage point over a one-year period to be cost effective.

3.1.3 To what Extent did the Tobacco Program Implement the CDC's "Best Practices" Model for Tobacco Use Prevention and Cessation?

3.1.3.1. Overview

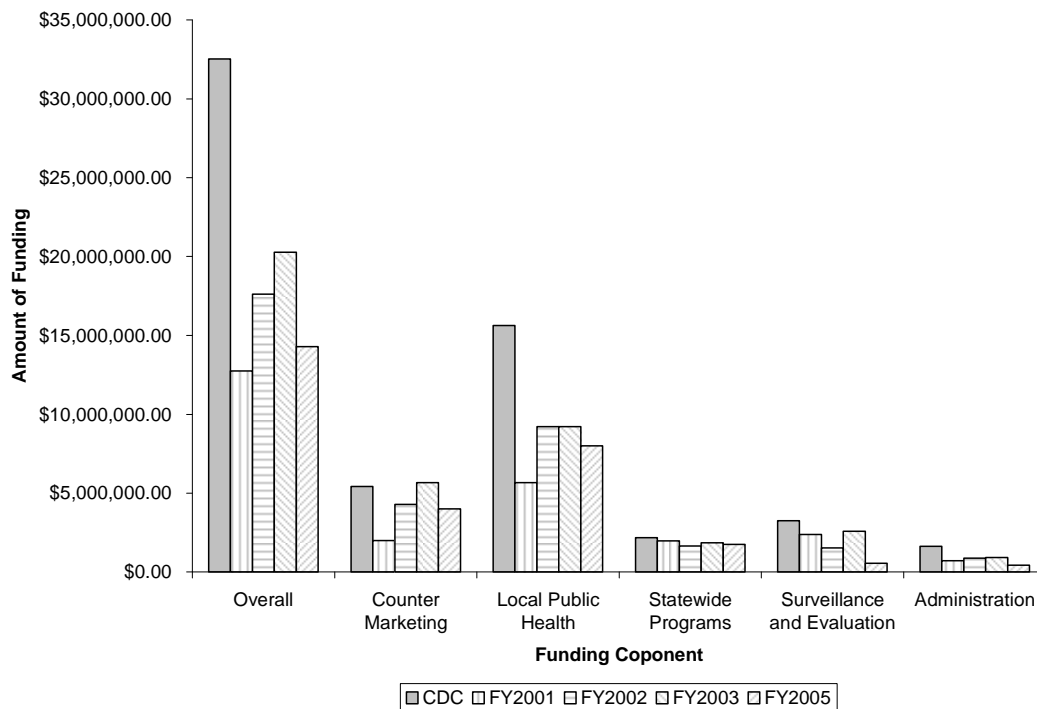
In accordance with the statutory requirements, Maryland's CRFP Tobacco Program follows CDC recommendations in terms of program components. However, Maryland's funding of its tobacco control program and most of its elements have been consistently under-funded with respect to CDC's recommended levels.

3.1.3.2. Implementation of the CDC's "Best Practices"

The statutory requirements for the CRF local Tobacco programs include funding formulas for allocating tobacco funds within the CDC recommended program elements for each jurisdiction. The relative weights assigned to the program elements are based on the CDC recommendation. Although Maryland's State tobacco funding falls short of the budget requirements set forth by the CDC, the Program has consistently incorporated all of the suggested CDC "Best Practices" components. For instance, funds were allocated for community-based, school-based, enforcement, and cessation programs. The Tobacco budget does not specifically allocate funds to the chronic disease programs; however, a substantial portion of the CRFP funds goes to the Cancer Program. While the Maryland program does have all the recommended components, the issue has been funding. According to the American Lung Association, Maryland consistently received a grade of "F" for its funding of tobacco control programs.

Figure 3-16 illustrates the trends in Maryland's funding of tobacco control programs from FY2002 to FY2005 (2006 funding allocations matched those of FY2005). The Maryland budget items are from annual reports to the legislature. For FY2003, revised budget figures were used. The figure presents the expenditures for each program component. The countermarketing and media component was reduced early in the program and currently focuses on increasing awareness of the statewide quitline. The local public health component funds jurisdictional programs to provide interventions and services under the CDC Best Practices recommended community-based, school-based, enforcement, and cessation elements. The statewide component has included funding of the MOTA program and the legal resource center and as of 2007 the statewide quitline. Surveillance and evaluation funds are used for the fielding of the MATS and MYTS.

Figure 3-16. Fiscal Changes in the Tobacco Program over Time, by Fiscal Year and From the CDC, by Component



Source: Annual Program budgets prepared by DHMH

The following calculations were made to derive CDC benchmarks:

- Overall budget: Maryland's population (5,421,869) multiplied by \$6 which is the lower end of the range for CDC's recommended per capita expenditure for medium size States, minus \$2.8 million for chronic disease programs since CRFP funding is also allocated to the Cancer Program
- Countermarketing: Maryland's population times \$1 which is the lower end of the range of CDC's recommended per capita expenditure
- Community programs: Maryland's population (5,421,869) multiplied by \$0.70 per capita
- Enforcement: Maryland's population (5,421,869) multiplied by \$150,000 plus \$0.43 per capita
- Cessation: Number of smokers according to 2004 <Maryland Behavioral Risk Factor Surveillance System (MBRFSS) (smoking rate of 19.7% of the adult population of 3,940,314) multiplied by 2 (recommended cost of counseling) plus \$1 per adult to identify and reach smokers
- School programs: \$4 per student in K–12 (839,150 in 2005) plus \$500,000 for staff development
- Statewide programs: Maryland's population (5,421,869) multiplied by \$0.40 per capita
- Evaluation: 10% of total Tobacco program budget
- Administration: 5% of total Tobacco program budget.

As shown in Figure 3-16, Maryland's tobacco control programs have been chronically under-funded. In FY2005, for instance, the budget was approximately one third of what is recommended by CDC using the lower range of recommended per capita expenditures. The only component of the Maryland budget that exceeded CDC recommendations was the funding for the countermarketing campaign in FY2003 and FY2004. In FY2005, the funding for countermarketing was reduced to \$500,000.

Maryland consistently kept its administrative costs under 5% in accordance with the CDC recommendation. With the exception of 2004, when no funds were allocated to evaluation and surveillance, Maryland's expenditures in 2002, 2004, and 2005 for evaluation were close to CDC's recommendation.

3.1.4. To what Extent was Cigarette Smoking among Maryland Youth and Adults Reduced In Comparison with other States' Tobacco Use Cessation Programs and With the Nation as a Whole?

3.1.4.1. Overview

Smoking prevalence among Maryland adults has been consistently lower than the national prevalence. Additionally, Maryland's adult smoking prevalence is lower than its neighboring states and Maryland compares favorably with some of the states that have more stringent clean indoor air laws, those with higher tobacco taxes, and those that spend more money per capita on tobacco control. Maryland has a lower youth smoking prevalence than the nation, and compares favorably to its neighboring states with respect to this measure.

3.1.4.2. Adult Smoking Rates

To answer this question, a comparison of adult current smoking rates reported by the Maryland Behavioral Risk factor Surveillance System (MBRFSS) was made to BRFSS data from States neighboring Maryland. A comparison between benchmarked Maryland rates and other States that received a top three ranking by the American Lung Association in three policy areas (clean indoor air, cigarette tax, and expenditures on tobacco prevention programs) was also made. Because the last available MBRFSS data were for 2004, the American Lung Association's 2003 ratings were used. It should be noted that the Maryland Adult Tobacco Survey reported a lower prevalence than MBRFSS in both 2000 (17.5%) and 2002 (15.4%), indicating a significant reduction in cigarette use among adults. However, MBRFSS data are used to enable for comparisons with other States.

Overall, Maryland adult smoking rates were consistently below the national average. However, because CDC does not provide confidence intervals for their national estimates, a statement about significance cannot be made. Maryland's smoking rate did not decline significantly from 2000 to 2004, but, none of Maryland's neighboring States showed significant declines either (Table 3-42). Maryland did show a significant decrease in current tobacco use from 2002 to 2005, as did Delaware and Virginia. In 2000, the Maryland smoking rate was significantly lower than rates in Pennsylvania and West Virginia. In 2004 and 2005, the Maryland smoking rate was significantly lower than Delaware, Pennsylvania, and West Virginia.

The adult smoking rates in Maryland compared favorably with States that received high rankings for their tobacco control policies. Only California, which received a Number 1 ranking for its clean indoor air policies, had smoking rates significantly lower than Maryland for all four comparison years. Massachusetts, which had the second highest cigarette taxes, had a lower adult smoking rate than Maryland during 2002, but not during the other comparison years. As mentioned earlier, in 2004, Maryland had lower adult smoking rates than Delaware, which was ranked second for its clean indoor air policies and ranked third for its expenditures on tobacco control. Maryland also had lower smoking rates than Arkansas in 2002, 2004, and 2005 which was ranked second for its expenditures on tobacco control.

Maryland had a relatively low smoking rate to begin with, which may explain why Maryland compares favorably with some of the states that have more stringent clean indoor air laws, those with higher tobacco taxes, and those that spend more money per capita on tobacco control. With regard to the latter point, ranking in terms of expenditures does not necessarily imply quality of program intervention, nor does it indicate whether allocations to tobacco control, even if they approximate CDC guidelines, are sufficient to yield changes in prevalence, especially in 5 years.

Table 3-42. Adult Smoking Rates for 2000, 2002, 2004, and 2005 in the United States, Maryland and Other States

State	2000	2002	2004	2005
Maryland	20.5 (19.1 – 21.8)	21.9 (20.2 – 23.6)	19.5 (17.8 – 21.2)	18.9 (17.8 – 20.0)
United States (excluding territories)	23.2 (—)	23.0 (—)	20.9 (—)	20.6 (—)
Neighboring States				
Delaware [†]	22.9 (20.7 – 25.0)	24.7 (22.5 – 26.9)	24.4 (22.5 – 26.3) ¹	20.6 (18.9 – 22.3)
Virginia	21.4 (19.2 – 23.5)	24.6 (22.6 – 26.6)	20.8 (19.3 – 22.3)	20.6 (19.0 – 22.2)
Pennsylvania	24.3 (22.7 – 25.8) ¹	24.5 (23.5 – 25.5)	22.7 (21.4 – 24.0) ¹	23.6 (22.4 – 24.8) ¹
West Virginia	26.1 (24.1 – 28.0) ¹	28.4 (26.6 – 30.2) ¹	26.9 (25.1 – 28.7) ¹	26.7 (24.9 – 28.5) ¹
States with highest ranking for tobacco control spending				
Arizona (1)	18.6 (15.4 – 21.7)	23.4 (20.8 – 26.0)	18.5 (16.2 – 20.7)	20.2 (17.8 – 22.6)
Arkansas (2)	25.1 (23.3 – 26.8)	26.3 (24.6 – 28.0) ¹	25.6 (23.9 – 27.3) ¹	23.5 (22.0 – 25.0) ¹

State	2000	2002	2004	2005
States with highest ranking for ensuring smoke-free environment				
California (1)	17.2 (15.8 – 18.5) ²	16.4 (14.9 – 17.9) ²	14.8 (13.5 – 16.1) ²	15.2 (13.9 – 16.5) ²
New York (3)	21.6 (20.0 – 23.1)	22.3 (20.8 – 23.8)	19.9 (18.6 – 21.2)	20.5 (19.3 – 21.7)
States with the highest cigarette taxes				
Connecticut (1)	19.9 (18.3 – 21.4)	19.4 (18.1 – 20.7)	18.1 (16.9 – 19.3)	16.5 (15.1 – 17.9)
Massachusetts (2)	19.9 (18.9 – 20.8)	18.9 (17.8 – 20.0) ²	18.5 (17.3 – 19.7)	18.1 (16.9 – 19.3)
New Jersey (3)	21.0 (19.4 – 22.5)	19.0 (16.9 – 21.1)	18.8 (17.9 – 19.7)	18.0 (17.0 – 19.0)

Sources: Prevalence estimates – CDC BRFSS; State comparison choices – American Lung Association, 2003

† = Delaware ranks number 3 for tobacco control spending and number 2 for ensuring smoke-free environments

— = No confidence interval available

1 = Significantly higher than Maryland during that year; 2 = Significantly lower than Maryland during that year

It is important to note that the MBRFSS data do not show the decrease in adult smoking prevalence reported by the Maryland Adult Tobacco Survey (MATS), and it is not clear whether other states might have shown a decrease in smoking using the same instrument as was used for MATS. However, the State rates are somewhat deceiving. According to MATS, smoking in Maryland is a regional issue. Whereas smoking rates in Baltimore City and some of the rural counties are well above State and national average rates, smoking rates in the District of Columbia metropolitan area (Montgomery, Howard, and Prince George's Counties) are much lower. These regional smoking rates may explain some of the comparisons with the neighboring States. For instance, Delaware is probably most similar to rural Maryland on the Delmarva Peninsula, whereas West Virginia is more similar to the Appalachian regions of Maryland in which it borders.

3.1.4.3. Youth Smoking Rates

To examine youth prevalence in Maryland and compared to other states and the nation, middle and high school prevalence rates were reviewed. Data for middle and high school prevalence in this section is taken from the National and State Youth Tobacco Surveys for 2000 and 2002, as reported by the CDC. Because Maryland does not have youth prevalence data for 2004, data for that year is not reported here. The same states that were compared in the adult smoking rates section were also compared in this section.

It is important to note that according to results reported by Maryland in their MFR reports, smoking declined 23.5% among high school students, from 23% in 2000 to 17.6% in 2004. However, the figures reported by CDC, and cited in Table 3-43, show a higher rate of high school smoking in Maryland. The reason for this discrepancy is that as required by the legislative statute [13-1003 (C2)], Maryland reports smoking rates for youth 17 and under, whereas CDC includes 18-year-old youth who are attending high school in its tally.

Maryland's prevalence among middle school and high school youth was lower than the nation in 2000 and 2002. In both 2000 and 2002, Maryland's middle school and high school smoking prevalence was lower than all comparison states but California. Because the confidence intervals are not available for the 2000 data, no statements can be made about statistical significance of the differences in prevalence. However, data are presented below for descriptive purposes. Because there are no 2006 data available for comparison from other states or the nation, the only comparisons made here are for 2000 and 2002.

Table 3-43. Middle School and High School Smoking Rates from 2000 to 2002, in the United States, Maryland, and Other States

State	2000		2002	
	Middle School	High School	Middle School	High School
Maryland	7.3	23.7	5.3	19.3
United States (excluding territories)	11.0	28.0	13.3	22.9
Neighboring States				
Delaware [†]	15.2	27.1	10.3	25.9
Virginia	—	—	—	—
Pennsylvania ^a	—	—	13.1	27.6
West Virginia	18.1	38.5	16.3	33.7
States with highest ranking for tobacco control spending				
Arizona (1)	11.4	—	—	—
Arkansas (2)	15.8	35.8	—	—
States with highest ranking for ensuring smoke-free environment				
California (1)	6.7	21.6	—	—
New York (3)	9.3	26.8	6.7	21.3
States with the highest cigarette taxes				
Connecticut (1)	9.8	25.6	5.9	22.0
Massachusetts (2)	—	—	7.1	20.7
New Jersey (3) ^a	—	—	8.1	24.5

Sources: Prevalence estimates – CDC National YTS; State comparison choices – American Lung Association, 2003

† = Delaware ranks number 3 for tobacco control spending and number 2 for ensuring smoke-free environments

a = Data for Pennsylvania and New Jersey was only available for 2001

— = No data available

3.1.5. Is there Evidence of Program Participation by Targeted Populations (Youth, Adults, and Minorities) Under the Tobacco Program?

The quantitative data collected by the Tobacco Program about community-based local Tobacco program activities does not provide audience breakdowns for many measures, but the local programs do provide some information about audience breakdown in the narrative portions of their quarterly and annual reports. The narrative information does not provide streamlined or consistent measures from which to make quantitative estimates of program participation among targeted populations in the community-based activities of the local programs. However, quantitative information is available for some school-based and cessation-based activities.

The programs are clearly targeting youth through their school-based programs, through providing education, peer programs, and cessation services to kindergarten through twelfth grade students, and education to pre-kindergarten students. School-based programs also target adults through providing cessation to college students. Details about the local activities under the school-based element are presented in Section 3.1.2.3 of this report, but some highlights include:

- Attendance of 1,118,576 K-12th grade students to tobacco education activities
- Attendance of 309,435 K-12th grade students to peer program activities
- Attendance of 51,807 pre-kindergarten students to education activities
- Attendance of 160,612 college students and 32,209 pre-kindergarten parents to tobacco education activities

- Provision of cessation services to 9,907 k-12th grade students, and 4,807 college students

Minority adults and pregnant women are participating in the local Tobacco cessation programs (detailed in Sections 3.1.2.5 and 3.2.1.3 of this report). Group cessation participant information about race and ethnic makeup, as well as whether women participants are pregnant is provided by the local programs. Group cessation participants included:

- 6,372 African American participants
- 619 Asian participants
- 990 Hispanic/Latino participants
- 439 Native American participants
- 1,607 pregnant women participants

3.1.6. To what Extent were Local Tobacco CRFP Plans Reflective of Community Needs and Priorities Identified by Data?

3.1.6.1. Overview

Local program plans include activities under each of the CDC's recommended elements. Programs are required to target minority populations including pregnant women. According to surveys conducted with local Tobacco program coordinators, it appears that local Tobacco program coordinators are highly familiar with State and local level data for use in planning and with the CDC's Best Practices guidelines to inform their program planning, and that they consider this information during planning. However, as discussed in Section 3.1.7 of this report, local program coordinators feel limited in the extent to which they can respond to local needs by the funding allocation requirements dictated by the grant requirements.

3.1.6.2. Local Tobacco Program Plans

Within the local public health component of the Tobacco Program, the goals for each local program are established by the State and encompass adult tobacco use prevention and cessation, youth smoking use prevention, and reduction of exposure to second hand smoke. In addition, local programs are required to target minority populations and pregnant women. The variations in program plans between jurisdictions typically lie in specific jurisdiction-created objectives listed under each program goal. Observed variability in specific objectives may reflect actual differences in concentration of resources and activities from jurisdiction to jurisdiction. Alternatively, these differences may be a matter of how individual jurisdictions structure their grant applications. Therefore, data obtained through examination of local program plans may not reflect the actual emphasis or specificity of local objectives.

3.1.6.3. Familiarity and Use of Data

Although the local plans are present in annual grant applications, the decision-making processes that occur during planning are not evident. In some cases, the plans do not appear to reflect the priorities set by the data. For example, although all local Tobacco programs have plans for adult cessation and youth prevention, setting of tobacco objectives targeting other tobacco related issues (e.g., secondhand exposure for youth and adults) does not appear to relate to specific needs identified by surveillance data. It is important to note that due to budget cuts, surveillance data was available in 2000 and 2002, then again in 2006, so data-based local planning may have been difficult given this time lag. Nonetheless, all (100.0%) of the Tobacco program coordinators that responded to the survey conducted by AIR indicated high levels

of familiarity of various sources of information for program planning. They also indicate that they find these sources to be important in the planning of their local Tobacco programs. Respondents assigned high familiarity ratings to the following information sources: CDC Best Practices guidelines ($M = 4.52$), local level data on tobacco use prevalence ($M = 4.82$) and tobacco enforcement ($M = 4.57$), and State level data on tobacco use prevalence ($M = 4.57$) and tobacco enforcement ($M = 3.78$). Respondents also indicated that they are very familiar with efforts of other existing local tobacco programs ($M = 4.22$).

While familiarity with sources of information is a key component to program planning, use of the information is essential to planning programs that are targeted to the communities for which they are intended. Tobacco program coordinators indicated that available guidelines, data, and coalition member input are important sources of information for the planning of their local programs. While all of the sources of information probed were rated as being very important for program planning, respondents assigned the highest importance ratings to local level data on tobacco use prevalence ($M = 4.82$) and local level data on enforcement ($M = 4.61$), input from coalition members ($M = 4.78$), and CDC Best Practices Guidelines ($M = 4.52$). State level data on tobacco prevalence ($M = 4.35$) and State level data on tobacco enforcement ($M = 4.17$), as well as information about other existing local tobacco programs are also important sources of information for program planning.

Given the importance assigned to local and state level prevalence data in program planning, the availability of this data is an important factor for local programs. As such, coordinators were asked to indicate their satisfaction with the availability and usefulness of local and State level prevalence data. While respondents indicated satisfaction with the usefulness of the data from the 2000 and 2002 Maryland tobacco surveys ($M = 3.87$), and only 13% of respondents indicated that the data from these surveys was not useful, availability of local data appears to be an issue for many programs. An equal proportion of respondents indicated satisfaction with the availability of local data (43.5%) as indicated dissatisfaction (43.4%), and the overall rating for this element was in the low-neutral range ($M = 2.96$). Respondents also expressed neutrality toward the availability of state level tobacco use prevalence data ($M = 3.17$).

3.1.6.4. Importance of Community Connections

During the in-depth interviews with Tobacco program coordinators, they expressed the importance of the relationships that their community health coalitions have with the community. They indicated that these relationships allow the programs to better understand the community needs, and to determine how to plan and implement the programs based on these needs. They suggested that programs are made stronger and more effective through input from coalition members who are part of the community, so have an intimate understanding of how best to serve them. This suggests that community needs are an important part of program planning and implementation from the coordinators' perspectives, and that local programs are somewhat informed about the community needs through the input of the local coalition members.

3.1.7. To what Extent did Local Health Tobacco Plans Remain Consistent with the CDC's "Best Practices" Models?

Local programs are bound to the structure of the CDC's Best Practices Model via the legislative requirement for allocating funds for the local health component based on the funding allocation recommendations of the Model. Grant applications and grant budgets are structured based on the CDC recommended elements of community-based, school-based, enforcement, and cessation programs.

While information about the specifics of program implementation is submitted in narrative form in the quarterly and annual reports, this narrative data is not conducive to a quantitative or comparative evaluation. However, the quantitative data that is being collected via the local program performance measures does indicate that at a broad level, the programs are conducting activities that are consistent

with those suggested by the CDC Model. For example, under the community element, local programs are providing education and outreach programs; there are education curricula being implemented in the schools to promote prevention and cessation; compliance checks are being conducted and citations are being made under the enforcement element; and group and individual cessation counseling are being provided to the public in all jurisdictions.

3.1.8. What State and Local Policy Measures were Adopted that Helped or Hindered the Tobacco Program's Efforts to Achieve its Goals

3.1.8.1. Overview

Through 2007, there is a statewide smoking ban in which smoking is not allowed in most indoor public places unless it is confined to a separately ventilated room. There are also statewide policies that limit youth access to tobacco products. Several local jurisdictions, including Howard, Montgomery, Prince George's, and Talbot Counties have enacted more stringent smoking bans, and a more stringent Statewide smoking ban was passed by the General Assembly and will begin enforcement in 2008. A tax increase on cigarettes in 2003 appears to have had an effect on cigarette sales, but this effect may be tempered by lower Program funding since 2004.

3.1.8.1. Local Program Perspective

On the Tobacco coordinator surveys fielded by AIR, respondents were asked to list up to five State or local policy measures that have helped program implementation during the 36 months prior to the survey. As shown in Table 3-44, most respondents were able to provide at least one (78.3%), two (65.2%), or three (56.5%) policy measures that helped program implementation. A smaller proportion provided four (34.8%) or five (17.4%) helpful policy measures. The most often cited helpful policies involved passage of local tobacco control enforcement policies including sales to minors, unpackaged cigarette sale fines, product placement ordinances, and earmarking funds from fines to support substance abuse prevention and treatment. These policies were also the most commonly mentioned helpful tobacco policies during the in-depth interviews of local Tobacco program coordinators. Passage of clean indoor air policies within the respondents' jurisdictions was seen as an important facilitator, as were smoke-free school and university grounds policies. Even in jurisdictions where jurisdiction-wide smoking bans have not been adopted, there have been individual bans adopted within local businesses, hospitals, universities, and parks. Also considered helpful policies by some respondents were implementation of the State quitline, passage of clean indoor air policies in surrounding communities, and the increase in base funding for smaller jurisdictions. Other helpful policies included those related to 100% smoking bans and attempts to enact clean indoor air policies. Some responses included items that are not necessarily State or local policies, including periodic coordinator and regional meetings, multi-organizational connections, and a locally implemented cessation tracking database.

Table 3-44. State or Local Policies that Have Benefited Local Tobacco Programs

Number	Beneficial State or Local Policies
14	Passage of local enforcement policies
8	Passage of clean indoor air policies within county/jurisdiction
5	Smoke-free schools and/or universities
4	Implementation of the State quitline
4	Clean indoor air act passed in surrounding communities/jurisdictions
4	Increased base funding in smaller counties/jurisdictions
2	County/jurisdiction passed a 100% smoking ban
2	Attempts to enact smoke-free bar and restaurant laws
2	Quarterly CRF coordinator meetings and regional meetings

Number	Beneficial State or Local Policies
1	Cessation tracking database implemented at the local level
1	Multi-organization connections enable new approaches to implementation
1	Failure of State clean indoor air legislation has increased determination

Local health officers most commonly pointed to enforcement policies, particularly product placement, as being the most helpful local policy measures for their local Tobacco programs. They indicated that having these policies in place hinders youth from easily accessing tobacco products. Additionally, local clean air ordinances that have been passed within their jurisdictions – either jurisdiction wide, or voluntarily among some businesses, hospitals, schools, and government campuses have also been helpful in raising awareness about tobacco issues, reducing secondhand exposure, and promoting cessation. A few local health officers indicated that the passage of the sales tax increase at the State level was a program facilitator in that it raised revenues and reduced smoking prevalence. While the push for a statewide indoor air policy is viewed as a positive step, the fact that it has not passed is a barrier to the program. It was suggested that the fragmented jurisdiction-based approach to policy promotion is not the most effective way to go about attempting to move the initiative forward.

Survey respondents were asked to list up to five State or local policy measures that have hindered program implementation during the 36 months prior to the survey. Many respondents (60.9%) were able to provide one policy measure that hindered program implementation. Fewer respondents provided two (34.8%), three (30.4%), four (17.4%) or five (8.7%) policy measures that hindered program implementation (Table 3-45). The most often cited policy measures that hindered program implementation were State level funding policies regarding funding levels, funding allocations, and local procurement processes; and the lack of passage of a statewide clean indoor air act. Tobacco coordinators echoed this information during the in-depth interviews, during which many indicated that the Tobacco funding allocations make it difficult for them to be flexible about program implementation in their jurisdictions. Other policies that pose a hindrance included lenience toward repeat youth sales violations, State mandated target populations, State hiring and termination policies, loss of evaluation funding eliminating outcomes data since 2002, funds being put toward the State quitline, and the requirement that youth gain parental permission to participate in cessation. Some of the responses included non-policy items such as lack of law enforcement participation, over-concern for smokers' rights, lack of consistent statewide program outcome measures, and lack of systematic infrastructure to promote coordination between local programs.

Table 3-45. State or Local Policies that Have Deterred Local Tobacco Programs

Number	Detrimental State or Local Policies
9	State funding policies regarding funding allocations and funding levels
8	Failure of Maryland Assembly to adopt Clean Indoor Air Act of 2006
4	Not passing bill to fine/revoke tobacco retailer licenses for repeat youth sales violations
2	State mandate regarding what populations to reach
1	State hiring and termination policies
1	Loss of evaluation funding eliminating outcomes data since 2002
1	Funds being put toward the State quitline
1	Parental permission required for youth participation in cessation services
1	Lack of law enforcement participation
1	Over-concern for smokers' rights
1	Lack of consistent statewide program outcomes measures
1	Lack of systematic infrastructure to promote and allow coordination between local programs

3.1.8.2. Clean Indoor Air

Through 2007, Maryland has a statewide smoking ban in which smoking is not allowed in most indoor public places unless it is confined to a separately ventilated room. However, the law exempted restaurants with liquor licenses, where smoking is allowed in the bar area. During the 2007 legislative session, the General Assembly voted to pass a law that will go into effect on February 1, 2008. The law will ban smoking in all indoor workplaces, including restaurants, bars, and private clubs. Establishments can request a hardship waiver from their local health office, but all waivers that are awarded will expire in 2011.

With no statewide pre-emption, local jurisdictions have been allowed to enact more restrictive clean indoor air ordinances. Currently, Howard, Montgomery, Prince George's, and Talbot Counties have more comprehensive clean indoor air laws than the State. In these jurisdictions, smoking is banned in all public places, including bars. Additionally, Carroll County's Parks and Recreation Department has banned smoking in its facilities. However, some local Tobacco program coordinators and local health officers expressed frustration in having the responsibility for clean indoor air defused throughout the state, to be championed by the individual jurisdictions. It was suggested that a statewide effort would be more likely to have broad results than dispersed local-level efforts can.

According to the MATS data, Marylanders are well aware of the dangers of secondhand smoke, and the percent of respondents stating that secondhand smoke is harmful or very harmful to one's health increased significantly each survey year from 2000 through 2006. According to the same survey, in 2004, 41% of adults in Maryland avoid places with secondhand smoke. The proportion of adults who indicated that they would support or strongly support smoking bans in bars and nightclubs increased significantly each survey year from 2000 through 2006. This indicates that there is sufficient public support for more comprehensive smoke-free ordinances. The documents reviewed for this analysis did not reveal additional factors that could influence adoption of more stringent local clean indoor air policies in the jurisdictions that do not have local laws. Generally, opposition to these ordinances comes from business communities that claim loss in business, although studies have shown that this is not the case (for example, Scollo, Lal, Hyland, & Glantz, 2003).

3.1.8.3. Youth Access

State laws governing youth access prohibit sales to minors, restrict placement of vending machines, and provide for fines for noncompliance. Maryland also prohibits shipment of tobacco products that are purchased from out-of-state vendors into the State. Several Maryland jurisdictions enacted more comprehensive youth access ordinances. For example, Baltimore City and Howard, Montgomery, and Prince George's Counties have additional statutes prohibiting sales to minors. These same jurisdictions, as well as Talbot and Wicomico Counties, prohibit self-service displays for cigarettes, requiring clerks' assistance to purchase tobacco products. Howard County and Baltimore City also have restrictions on some cigarette promotion.

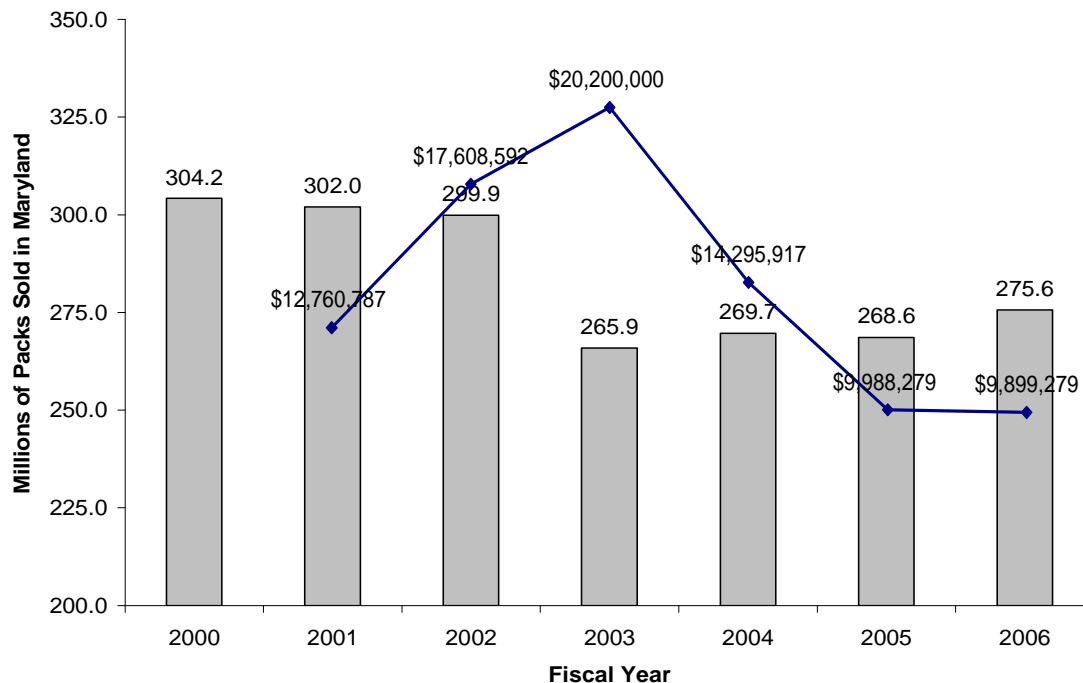
The enforcement of youth tobacco laws (typically sting operations) are financed locally with CRFP funds. According to data available from site visits, enforcement issues were identified in 4 out of 15 visits. This suggests local variability in enforcement efforts and possibly local policies governing enforcement activities.

3.1.8.4. Cigarette Tax Increase

Effective June 1, 2003, cigarette tax increased from \$0.66 per pack to \$1.00 per pack in Maryland. Since the increase, there has been an 11% average decrease in cigarette sales three years post-increase vs. three

years prior. However, coinciding with a decline in Program funding levels for the CRFP Tobacco Program, cigarette sales appear to be leveling or slightly increasing since FY2003 (Figure 3-17).

Figure 3-17. Millions of Packs of Cigarettes Sold in Maryland and Total CRFP Tobacco Funding



○
Source: MD Comptroller, 20 pack equivalents

3.1.8.5. Funding

CRFP provides funding to local programs following an established formula. The funds are divided between specific programmatic initiatives: community based, school based, enforcement, cessation, and administration. The percentage of budget allocation for each cost center is the same for all jurisdictions, but originally the formula was based strictly on the population of the county. Currently, the funding formula provides a base amount plus extra allocations based on demographics. The current funding level for the Tobacco Program is below CDC recommendations, including the countermarketing and media component, which was decreased by 95% to \$500,000.

Based on the review of local budgets, only Montgomery County provides additional funding to tobacco control programs. Obviously, local financial contributions to the programs as a policy initiative should facilitate overall tobacco control efforts.

3.1.9. How well did the Surveillance and Evaluation Activities Work in the Tobacco Program?

Maryland has an excellent tobacco surveillance system consisting of MYTS and MATS that provides data that is representative of each jurisdiction, and there is a legal requirement that Maryland schools participate in MYTS if selected which assures high quality data on youth tobacco use. However, budget cuts lead to suspension of surveillance activities from 2002, leaving the local Tobacco programs without current prevalence data for almost four years. The surveys were fielded once again in 2006. Lack of periodic surveillance activities denies the state and local level information necessary to both benchmark progress and to guide strategic planning of the program.

When asked their thoughts about the availability of data for the local Tobacco programs, most Tobacco program coordinators indicated that it would be helpful for their program planning to have local data more frequently than they currently receive it. Many feel that the lack of current local data makes it difficult for them to evaluate how their programs are doing, or what effect they are having on their communities. However, many coordinators indicated that lack of local data is not a concern for them, as some collect their own local data. Consensus among coordinators is that updated local data would be most useful if it were available biennially.

Local program tracking is separate from the surveillance and evaluation activities of the Tobacco Program. However, the ability to connect local efforts to outcomes may be enhanced by connecting these activities and by implementing a tracking system by which local program activities can be quantified and connected to outputs and outcomes.

3.1.10. What Factors Helped or Hindered the Implementation of the Tobacco Program?

3.1.10.1. Overview

Local program coordinators provided input via surveys and in-depth interviews regarding factors that have helped or hindered the implementation of their local Tobacco programs. Local CRFP Tobacco coalition members also provided input regarding facilitators and barriers via surveys. Local Health Officers and State level Tobacco Program staff were also asked to provide information about program facilitators and barriers during in-depth interviews.

Through the surveys and in-depth interviews, local Tobacco program coordinators indicated that their local Tobacco programs have been helped most by operating within supportive environments, having capable and knowledgeable subvendors and staff, and having funding to implement their programs. State DHMH Tobacco staff feel that the support and training that they provide to the local programs and the availability of the Legal Resource Center have been important program facilitators.

During interviews, local Tobacco program coordinators and local health officers indicated that funding fluctuations are the biggest barriers to program implementation. Specifically, it was indicated that fluctuations in funding make it difficult for programs to maintain subvendor relationships and consistent staffing for their programs. According to the State DHMH Tobacco staff, the biggest barriers to Tobacco Program implementation have been the lack of skills, staff, and time among local program staff to collect better evaluation data.

3.1.10.2. Facilitators and Barriers

In addition to the policy measures indicated in Section 3.1.8.1, local program coordinators provided input via surveys and in-depth interviews regarding other factors that have helped or hindered the implementation of their programs. Coordinators were asked to identify up to three facilitators and up to three barriers they face in implementing their programs. Additionally, Tobacco program coordinators were asked to indicate the level of support that they receive from multiple community segments, and the extent to which a lack of support affects program implementation.

Local Health Officers and Tobacco program coordinators were also asked to provide information about program facilitators and barriers during the in-depth interviews. Their responses to questions regarding facilitators and barriers to program implementation are detailed in this section.

General Facilitators. Survey respondents were asked to list the top three facilitators to implementing their programs. Program coordinators were also asked to provide input about program facilitators and barriers during in-depth interviews. All survey respondents were able to provide at least one facilitator,

and most were able to provide two or three. As shown in Table 3-46, the most common facilitator mentioned was the support that programs receive from the community. The relationships that the programs have made with organizations and leaders in their communities were also discussed as a facilitator for some respondents during the in-depth interviews. It was suggested that these relationships facilitate access to the population as well as to available resources in the communities, assisting in both planning and program implementation. Access to the population allows programs to better understand community needs, while access to available resources enables programs to find ways to meet those needs from within their communities.

Support from the local coalitions and local health departments were also seen as important facilitators for many of the respondents. During in-depth interviews, Tobacco coordinators indicated that their local health departments see tobacco control as an important issue and give them the freedom to plan and implement their programs as needed. The capabilities and knowledge of subvendors and Tobacco program staff, as well as the availability of funding were noted as facilitators by some respondents. Some coordinators indicated that the fact that they had existing programs prior to the implementation of CRFP gave them a head start in planning and implementation of their programs, and gave them a good foundation to build from.

A few respondents indicated that the support they receive from the local schools, the State, their MOTA program, and local law enforcement, as well as the support they receive through partnering with other jurisdictions, and local program organization are important facilitators for implementation of local Tobacco programs. Other facilitators mentioned include support from faith-based organizations and physicians, availability of general resources, and increased program marketing.

Table 3-46. Facilitators for Implementing Local Tobacco Programs

Facilitator	Most Important	Second Most Important	Third Most Important	Total Mentions
Community Support	5	2	4	11
Coalition Support	1	4	3	8
Local Health Department Support	4	2	1	7
Capability and knowledge of subvendors	3	1	2	6
Capability and knowledge of staff	3	3	0	6
Funding	3	1	2	6
Schools Support/relationships	1	2	1	4
State DHMH Support	1	1	0	2
MOTA support	0	2	0	2
Law enforcement support	0	0	2	2
Partnerships with other jurisdictions	0	2	0	2
Local program organization	1	1	0	2
Faith-based organizations support	1	0	0	1
Physician Support	0	0	1	1
Availability of resources	0	0	1	1
Increased program marketing	0	0	1	1
Total	23	21	18	62

According to the local health officers, the two most important facilitators for the local Tobacco programs are the funding they receive from the State and having active and interested coalitions to plan and implement their programs. Some local health officers also mentioned that having staff that are capable and knowledgeable is an important facilitator. A few local health officers indicated that they have strong relationships with their local schools, which helps them to get tobacco and smoking education

disseminated throughout their communities. Similarly, relationships with the local communities were mentioned facilitators by a few respondents, who indicated that this support not only allows the programs to enter into the communities and implement their programs, but also allows the programs to better understand the needs of the populations within their communities. A few local programs also benefit from having had existing local Tobacco programs prior to CRFP, which provided a strong framework for building their current programs.

Tobacco coalition members that responded to the Coalition Members Surveys also indicated the top three program facilitators from their perspective. Over one third of all Tobacco coalition members surveyed provided at least one facilitator to Tobacco Program implementation. The most common facilitator mentioned was the support received from the local coalition. This may include strong coalition leadership, collaboration among members, subcommittee activity, and a good membership mix (for example, participation by minorities and professionals). Support from the local health department, particularly the staff, was the second most commonly mentioned facilitator to program implementation. Community collaboration, availability of funding, and outreach efforts were mentioned as other important facilitators. A few respondents mentioned legislative and law enforcement support, such as smoking bans or activity of enforcement officials, as positively affecting the CRF Tobacco Program, as well as the interest of the general public in this health issue, support from local public schools, and vendor support.

DHMH Support Facilitators. Coordinators were asked specifically about the types of support that they receive from DHMH that help them to implement their programs. A majority of respondents indicated that they find the regional meetings to be helpful. The opportunities to network with other programs and hear about what they are doing are helpful in planning and implementation. Many coordinators indicated that they would like to have more opportunities to interact with other programs. Some Tobacco program coordinators indicated that DHMH staff answers questions when they are asked. Some coordinators indicated that they would like to receive more constructive feedback from DHMH staff to help them to correct problems that are pointed out. Some coordinators also indicated that the program guidelines that have been provided and the trainings they have received from DHMH have been good, but they would like to have more training available that target their specific needs. They acknowledge that staff shortages and staff turnover at the State level may make it difficult for more support to be provided.

State CRFP Tobacco staff perspective. State CRFP Tobacco staff were asked to describe any factors they thought were helpful to the implementation of the Tobacco Program. Half of the respondents thought the assistance they provided to local programs was helpful in the program implementation process, including previous trainings with local staff in all counties and enhanced technical assistance and trainings with staff in smaller counties. Half of the Tobacco program respondents also thought that the Legal Resource Center would be helpful for ensuring more implementation consistency among local programs in the future through training on surveillance, data collection, and best practices. Other factors identified by Tobacco staff as helpful during implementation included: the fact that the program is heavily community focused; a strong backing from the advocacy community; and, efforts by MOTA in gaining acceptance of the program by underserved minority populations.

General Barriers. Survey respondents were asked to list three barriers to program implementation, excluding budget, staffing, and community support, which were probed separately. Most respondents were able to provide one or two barriers to Tobacco program implementation, and some were able to provide three barriers. Table 3-47 shows that the most commonly stated barrier to Tobacco program implementation was the timeliness and requirements of the procurement process. Competing priorities among the public and lack of support from State DHMH staff and local schools were listed as barriers from some respondents. Other barriers listed included lack of political support, issues with subvendors and MOTA grantees, restrictiveness of the CRFP grant requirements, lack of local coalition support,

language and cultural barriers, and lack of program updates from the State. Several other barriers were listed by single respondents.

Table 3-47. Barriers to Implementing Local Tobacco Programs

Barrier	Most Important	Second Most Important	Third Most Important	Total Mentions
Procurement process	5	3	1	9
Competing priorities among the public	2	1	1	4
Lack of support from State staff	1	2	1	4
Lack of school support	0	2	2	4
Lack of political support	1	0	2	3
Issues with subvendors	2	0	1	3
Issues with MOTA	1	1	0	2
Restrictiveness of CRFP grant requirements	2	0	0	2
Lack of coalition support	1	0	1	2
Language/cultural barriers	0	2	0	2
Lack of State-level program updates to reflect new data	0	1	1	2
Lack of comprehensive clean indoor air act	1	0	0	1
Lack of data system for submitting local information	1	0	0	1
Lack of time	1	0	0	1
Lack of support from faith-based organizations	0	1	0	1
Excessive reporting requirements	0	1	0	1
Smokers are hard to reach	0	1	0	1
Lack of client follow-through	0	0	1	1
Lack support from enforcement	0	0	1	1
Total	18	15	12	45

Tobacco program coordinators were asked during in-depth interviews what barriers they have faced in planning and implementing their programs. Two factors were stated most often: funding issues and the mini-grant processes. Specifically, programs have difficulty with the fluctuations in funding, which create difficulty in maintaining staff and subvendors, and delays in funding which make implementation challenging. Coordinators suggested that it is difficult to be proactive when the funding – both in terms of timing and amount – is so variable. Additionally, the mini-grant process was described as lengthy, cumbersome, and confusing. It was mentioned that the lag between when mini-grants are submitted and when they are approved makes it difficult to keep activities ongoing.

Local health officers also most commonly identified funding fluctuations as barriers to their local Tobacco programs. Specifically, they indicated that fluctuations in funding make it difficult for them to maintain full time staff for their programs, and to maintain interest among subvendors. Some local health officers indicated that the lack in flexibility for how funds can be spent by local programs makes it difficult for local programs to fund interventions and activities that they think will be effective, but that don't fall neatly into the funding categories.

Some coordinators indicated that they have difficulty determining how best to implement their programs and they would like to be able to get more guidance and support from DHMH staff and from other programs to assist with these difficulties. Similarly, some local health officers suggested that a lack of communication with DHMH and of programmatic advice from DHMH is a hindrance for local programs. It was mentioned that suggestions from DHMH tend to be administrative, rather than programmatic in nature, and that if there were content experts available to guide the programs, it would be helpful.

Some coordinators find that the performance measures that they are required to report on do not measure their program activities appropriately, and they would like to find better reporting measures that will allow them to better depict their programs. Some programs have difficulty getting the required partners on board to implement their programs, indicating that schools and law enforcement are sometimes reluctant to join the program or are unwilling to implement the activities that the Tobacco program needs.

Local Tobacco coalition members were invited to list the top three program barriers from their perspectives on the Coalition Members Survey. The most commonly stated barrier was funding. Inadequate funds and delays in the receipt of funding were most frequently specified as barriers. Rigidity in how funds may be used and perceived inequality in the distribution of funds were other commonly mentioned funding-related barriers. Barriers in connection with outreach efforts were the second most frequently mentioned and lack of support from the community or lack of collaboration among community organizations was third. Other common barriers mentioned were lack of leadership and communication from local health departments, and in some cases from DHMH, coalition-related challenges (for example, dissatisfaction with the membership mix), and general disinterest or denial among community members.

Government Bureaucracy Barriers. When asked, most of the Tobacco program coordinators indicated that local government bureaucracy is not an issue for them. However, some coordinators suggested that the cultures of their communities make it difficult to push for policy changes and implementation in their jurisdictions. A few coordinators indicated that the layers of authority created by the involvement of their local government sometimes slow the grant process when they administer their grants to local organizations.

Grant Requirement Barriers. Coordinators were asked whether they face any barriers related to the requirements of their grants. For a few coordinators, the grant requirements do not pose an obstacle. For those that do find barriers with the grant requirements, most mentioned had to do with difficulties with the funding of organizations within their jurisdictions. Specifically, coordinators indicated that finding organizations with the capacity and expertise to fill program needs can be difficult. Additionally, they see the process for the subgrants as time consuming with a lengthy period between when the applications are filed and when they are funded, resulting in less time to implement the program activities.

Some coordinators find the State grant process also to be time consuming and redundant. They indicated that the repetitive nature of the information requirements for the State grant lengthen the amount of time that it takes to file the applications. As with the mini-grants approval process, some coordinators indicated that it takes a long time for the State grants to be approved and funded, leading to the need for shifts in timelines for implementation.

Staffing issues. According to the Tobacco coordinator survey respondents, the majority of local Tobacco programs currently has some staff vacancies (60.9%) and has had some vacancies during the past 12 months (60.9%). Many tobacco program coordinators (68.2%) expressed concern regarding their ability to offer competitive salaries ($M = 3.50$), but most (54.5%) did not indicate concern about abilities to offer competitive fringe benefits packages to attract and maintain staff ($M = 3.00$). While less than one-third (31.8%) of Tobacco program coordinators indicated that they have difficulty hiring qualified staff, greater than two-thirds (68.2%) indicated that there is a limited pool of qualified candidates from which they can draw new staff ($M = 3.73$) and there was a significant positive relationship between these two factors, $r(22) = .778$, $p < .01$. (See Table A-15 in Appendix A). Local programs may benefit from State Tobacco Program staff reviewing and providing input on hiring practices to help ensure more stability in staffing at the local level.

State CRFP Tobacco staff perspective. State CRFP Tobacco staff were asked to describe any factors they thought hindered the implementation of the Tobacco Program. The most common program-level

barrier mentioned was the lack of skills, staff, and time among local program staff to collect better evaluation data. Other program-level barriers mentioned by Tobacco staff included: a lack of comprehensive local training on surveillance issues; competition between state contractors and local program staff; internal local-level stylistic differences; and, the impact that a lack of permanent staff at DHMH has had on local programs. In addition, Tobacco staff stated that the advocacy community is frustrated by the fact that they cannot receive government funding directly. Finally, State Tobacco staff noted that smaller jurisdictions face greater challenges than larger jurisdictions because they have fewer resources and more staff turnover related to lower job satisfaction.

3.1.10.3. Community Sector Support

Respondents were asked to rate the level of support (from very strong to very weak) that they receive from several community sectors. It appears that community support for local tobacco control efforts tends to be fairly strong from most sectors and for most jurisdictions. Support from health care providers, local health departments, non-profit organizations, and adults was seen as moderate to very strong by all (100%) of respondents. A small proportion of respondents indicated weak or very weak support from youth (4.3%), community-based organizations (4.3%), faith-based organizations (8.6%) substance abuse agencies (9.0%), and community leaders (9.1%). Lack of support was indicated from a larger proportion of respondents from school officials (26.1%), local media (21.7%), local businesses (18.2%), elected officials (18.2%), and grassroots organizations (17.4%). Moreover, all respondents (100%) who indicated a lack of support from school officials, elected officials, community-based organizations, and youth indicated that this lack of support affects program implementation. Weak support from other sectors was seen as affecting program implementation by a smaller proportion of respondents: local media (60.0%); substance abuse agencies, community leaders, faith-based organizations, and local businesses (50.0%); colleges or universities and grassroots organizations (25.0%).

3.1.11. What Changes, if any, Should be Made in the Tobacco Program?

3.1.11.1. Overview

Most of the changes that local Tobacco program coordinators and local health officers suggested were administrative in nature. The most often suggested change was to loosen the State grant funding requirements so that programs have more flexibility to tailor their programs to the needs of their communities. Other changes included improving and increasing communication between local programs and the State and among local programs, reducing reporting requirements, and increasing training opportunities.

3.1.11.2. Local Program Coordinator Suggestions

The changes that were recommended by Tobacco program coordinators during the in-depth interviews were primarily administrative changes that would help them to better plan and implement their programs. The change suggested by the most local Tobacco program coordinators was to loosen the Tobacco grant funding requirements, and allow programs the latitude to determine how to allocate their funds among the funding elements. Tobacco program coordinators indicated that this change would enable them to be more responsive to the needs of their communities, and to customize their programs according to available data, coalition suggestions, and community needs. It should be noted that Tobacco grant funding requirements for allocating funds to the program elements come from task force recommendations that are based on CDC Best Practices recommendations.

Another suggestion that was made by many Tobacco program coordinators was to improve communication between DHMH staff and local programs, and to implement ways to allow better communication among local programs. For example, coordinators would like to regularly hear about what

DHMH Tobacco staff learns about new developments in the field of tobacco prevention and cessation via telephone conference calls or email. Coordinators indicated that they would like to know where funding is going in their communities and how it is being used, as in the case of the MOTA programs. They would like to have a mechanism by which they can discuss planning and implementation issues with other local Tobacco program coordinators, such as a list-serve or an Internet web page. Through this type of mechanism, they can assist one another in finding resources or problem solving.

Local data and program activities measurement were areas for improvement for some local coordinators. There is concern among some local Tobacco program coordinators that the current program performance measures do not allow them to accurately depict their program activities. Furthermore, there is some confusion about why the current performance measures were chosen, and what relationship they have to the CDC's best practices recommendations. Additionally, there was some indication that programs would like to have new outcomes data collected and available for review at least biennially. Program coordinators indicated that the current lag in data availability makes it difficult for them to determine the effectiveness of their programs, and to make appropriate changes in their planning and implementation.

While program coordinators consistently indicated their satisfaction with the regional meetings, and expressed their satisfaction with the information that they obtain at those meetings, some coordinators suggested that provision of more programmatic training and technical assistance would improve program functioning. Specifically, coordinators mentioned the need for training or technical assistance in the areas of policy promotion, youth outreach, statewide tobacco control, and program capacity building.

A few local tobacco program coordinators indicated that a better funding mechanism that is timelier would be a good change for their programs. Funding delays make it difficult for programs to fully implement their planned activities, because they reduce the amount of time within which subvendors and staff have to accomplish their goals. Similarly, reducing funding fluctuations would benefit the local programs by enabling them to plan early and approach an appropriate number of subvendors for assistance in the planning and implementation process.

3.1.11.3. Local Health Officer Suggestions

Some local health officers would like to see fewer data reporting requirements for the Tobacco Program. They indicated that the current reporting requirements are cumbersome and time consuming, and that they have not been consistent over time. Other recommendations for changes to the Tobacco program included more frequent outcomes data collection and more technical assistance from DHMH around programmatic issues.

Finally, a few local health officers indicated that incorporating a statewide media element to support the program would lend credibility to the local programs. Additionally, it was suggested that more visibility for the quitline from the State level, and the demonstrated awareness that some rural communities can only be reached through advertising spots on local television channels would be helpful to increase use of this resource among rural communities.

3.2: To What Extent was Minority Outreach and Participation Achieved?

3.2.1. To what Extent were Racial and Ethnic Minorities Served Through the Local Tobacco Programs?

3.2.1.1. Overview

Local Tobacco programs are conducting activities to specifically target minorities in their jurisdictions. Cessation programs in the jurisdictions are serving appropriate proportions of minority individuals, and

the proportion of minority individuals participating in cessation groups has increased over time. Adult minority current smokers in Maryland report greater intentions to quit smoking within the next 12 months, are more likely to have seriously tried to quit smoking within the past 12 months, and are less likely to report having no intention to quit smoking than the general Maryland population. Minority adults are significantly less likely to have ever tried smoking than Maryland adults in general, and the percent indicating that they have tried smoking, are current tobacco users, or are current smokers has decreased over time.

3.2.1.2. Local Program Activities

To determine whether local programs are serving racial and ethnic minorities through their programs, data submitted by the programs indicating activities that target minority populations were examined. These data indicate that local Tobacco programs are succeeding in serving racial and ethnic minorities through funding minority-based organizations and churches, and by conducting minority outreach activities. The following accomplishments in serving racial and ethnic minorities in the State have been made by the Tobacco Program:

- 411 minority-based organizations have been funded
- 283 minority-based churches have been funded
- 1,720 minority outreach campaigns have been conducted
- 300 minority outreach campaigns have been conducted in collaboration with the MOTA Program.

The data show that, as would be expected from the population mix in the State, the most highly targeted minority group is African Americans (Table 3-48). There is little variability between jurisdictions with respect to this finding, and there is no discernable pattern of providing outreach to minority communities within or between jurisdictions. That is, jurisdictions appear to be doing a bit of everything over time.

Funding of African-American organizations and churches, Native American organizations, and Asian churches peaked in FY2004 and declined subsequently. Funding of all other organizations and churches has leveled beginning in FY2004, along with the overall funding provided to the local health component of the program. The reported frequency of minority outreach campaigns targeting all minority populations jumped substantially from FY2003 to FY2004, as did reported outreach collaborations with the MOTA Program. While the frequency of minority outreach campaigns targeting African American and Native American populations continued to increase in FY2005, the frequency of Hispanic/Latino targeted outreach campaigns declined during that time period, as did outreach collaborations with the MOTA Program. With the exception of minority outreach campaigns targeting Hispanic/Latino populations, the frequency of minority outreach campaigns decreased in FY2006, as did collaborations with MOTA. See Tables B-38 through B-40 for jurisdiction-level detail.

Table 3-48. Local Tobacco Program Activities Targeting Racial and Ethnic Minority Populations by Type of Activity and Fiscal Year

Type of Activity	FY2002	FY2003	FY2004	FY2005	FY2006
Funding of minority-based organizations					
African American	18	51	75	58	39
Hispanic/Latino	3	6	30	28	20
Asian	7	12	22	21	6
Native American	0	1	7	4	3
Funding of minority-based churches					

Type of Activity	FY2002	FY2003	FY2004	FY2005	FY2006
African American	15	28	94	85	34
Hispanic/Latino	0	2	4	6	5
Asian	0	0	3	1	2
Native American	0	0	2	2	0
Minority outreach campaigns					
African American	6	54	398	441	350
Hispanic/Latino	0	17	83	59	61
Asian	0	8	86	86	26
Native American	0	1	9	24	11
Outreach collaborations with MOTA program	0	22	131	82	65

Source: DHMH Tobacco Program Activities Database

The limitation of these data is that they do not clearly reveal the reach of the local efforts. Funding three African-American organizations in Allegany County, where African-Americans comprise only 5.3% of the population, may reach a larger proportion of African-American individuals than funding three community-based organizations in Baltimore County, which is 23.2% African-American. Furthermore, these data do not reveal the intensity of minority outreach campaigns. One outreach campaign in Frederick County might reach more individuals than 13 smaller outreach efforts in Calvert County. Although local programs provide narratives that reveal their program activities, they do not link each activity to its reach, and where there is a link to reach, it often is not broken down by audience type. This was also found in review of the subvendor reports. Therefore, determining effectiveness of minority outreach activities via reviewing currently available program activities information is not feasible.

3.2.1.3. Reaching Maryland's Minority Populations

Surveillance and Evaluation. Through the survey sampling design used for fielding the MATS and MYTS, Maryland ensured that a sufficient number of race and ethnic minorities would be included in the outcomes data collection. The race and ethnic breakdown of the MATS and MYTS survey respondents for each survey year are presented in Table 3-49.

Table 3-49. Race and Ethnic Breakdown of MATS and MYTS Respondent Sample

Population	Adults			Youth		
	2000	2002	2006	2000	2002	2006
White Non-Hispanic	12,676	11,995	16,884	27,195	31,423	39,162
Black Non-Hispanic	2,692	2,485	3,145	28,139	33,104	40,796
Hispanic	374	392	684	37,310	40,734	48,972
Asian Non-Hispanic	249	225	289	*	*	*
Native American Non-Hispanic	262	275	194	*	*	*
Other Non-Hispanic	135	88	229	11,726	15,163	19,355
Subtotal Known Race-Ethnicity	16,388	15,460	21,425	2,665	3,831	5,859
Missing Race-Ethnicity	208	177	374	3,574	4,747	5,642
Total Including Missing	16,596	15,637	21,799	55,600	64,888	80,089

* = for youth, Other Non-Hispanic includes Asian, Native American, Pacific Islander, and Other Non-Hispanic

Notes: for adults, Other Non-Hispanic includes Pacific Islander and Other Non-Hispanic

Missing Race-Ethnicity includes refused to provide race-ethnicity and incomplete coding on the input race-ethnicity variables

Cessation. An important aspect of the CRFP Tobacco Program has been to increase cessation among adults who are current smokers. There has been a program emphasis on providing cessation services and outreach to minority individuals. The local Tobacco programs are including minority individuals and pregnant women in their cessation activities, and the proportion of minority individuals that participated in group cessation classes increased over time (Table 3-50). See Tables B-41 and B-42 for jurisdiction level detail.

Table 3-50. Proportion of Group Cessation Class Participants who are Minorities and Pregnant Women by Fiscal Year

Participant Type	FY2003	FY2004	FY2005	FY2006
African American	14.4%	21.5%	25.7%	31.0%
Native American	0.9%	1.9%	1.5%	2.1%
Hispanic/Latino	2.3%	3.9%	3.8%	4.4%
Asian	1.2%	2.8%	2.9%	1.8%
Pregnant women	2.4%	2.2%	7.6%	11.6%

Source: DHMH Tobacco Program Activities Database

The targeted outreach to minority individuals may be increasing cessation among the targeted groups. As shown in Table 3-51, the percent of minority individuals that indicated they intend to quit smoking within 30 days, 3 months, or 6 months of taking the MATS survey was greater than the percent indicating intent to quit during these time periods overall, although the difference was not significant. Similarly, the percent of current smokers who are minorities that made a serious attempt to quit smoking in the past year was greater than the overall percent. The percent of minorities indicating that they are not planning to quit smoking was lower than the percent of individuals indicating a lack of intent to quit overall.

Table 3-51. Percent of Individuals Indicating Intent to Quit Smoking

Population	30 Days	3 Months	6 Months	12 Months	Quit for 1+ Day in Past 12 Months	Not Planning to Quit
Overall	18.8 (16.3-21.2)	14.5 (12.3-16.6)	11.3 (9.4-13.3)	14.5 (12.3-16.6)	31.6 (28.8-34.3)	18.7 (16.2-21.1)
Minority	24.3 (19.4-29.3)	17.8 (13.6-22.1)	13.5 (9.7-17.2)	11.6 (8.2-15.0)	35.5 (30.2-40.3)	12.9 (9.2-16.7)

Source: 2006 Maryland ATS

Notes: Due to a change in the intent to quit measures, no comparisons can be made over time

Prevention. Minority individuals between the ages of 18 and 29, a demographic that is highly reachable with prevention messages have been consistently significantly less likely to ever have tried a cigarette than the general population. However, the proportion of both groups that ever tried cigarettes has increased slightly from 2000 to 2006. The current cigarette use prevalence among minorities is similar to that of the general population, with a similar pattern of results over time – that is, there was a significant decrease in current cigarette use from 2000 to 2006 among minorities, as well as in general. Current tobacco use trends have been similar among minorities and the general population, both declining over time. Minorities reported significantly lower current tobacco prevalence in 2006 than in 2002 or 2000 (Table 3-52).

Table 3-52. Cigarette and Tobacco Prevalence among the General Population and Minorities by Year

Prevalence Measure and Population	2000	2002	2006
Ever Tried Cigarettes			
Overall (18-29 year old)	63.3 (59.3-67.3)	65.9 (61.5-70.4)	64.7 (60.1-69.4)
Minority (18-29 year old)	51.2 (46.4-55.9)	55.5 (50.1-60.8)	54.8 (49.9-59.7)
Current Cigarette Use			
Overall	17.5 (16.6-18.4)	15.4 (14.5-16.3)	14.8 (14.0-15.6)
Minority	18.5 (16.8-20.2)	16.6 (14.8-18.4)	14.9 (13.4-16.4)
Current Tobacco Use			
Overall	21.8 (20.9-22.7)	19.8 (18.8-20.8)	18.5 (17.7-19.4)
Minority	20.6 (18.8-22.4)	19.1 (17.2-21.0)	17.3 (15.7-18.8)

Source: Maryland ATS

3.2.2. What Factors Contributed, or Hindered, Minority Outreach and Participation in the CRFP Tobacco Program?

3.2.2.1. Overview

The main facilitator for community outreach for the Tobacco Program is having coalition members that can provide links to the community. As such, MOTA's role in helping to recruit minority individuals onto the coalitions is an important one for the Tobacco Program. Most local Tobacco coordinators are satisfied with the efforts of MOTA in supporting this activity, but some indicated that they have some difficulties communicating with and understanding the role of their MOTA vendors.

3.2.2.2. Outreach Facilitators

As mentioned in Section 3.1.5 of this report, through the coordinator survey, Tobacco program coordinators indicated that they are satisfied with minority participation on their local coalitions, but they appear to have needs beyond those served by the MOTA program with respect to outreaching to minority populations in their jurisdictions. It appears that local Tobacco programs are satisfied with the minority funded initiatives and minority focused programs in their jurisdictions.

Local Tobacco program coordinators discussed facilitators and barriers to minority outreach and participation during the in-depth interviews. According to the local Tobacco coordinators, the local Tobacco coalitions are the main link to the communities for the local programs. Therefore, the diversity of the coalitions will have an effect on the extent to which the programs are able to target the minority populations in their communities. Programs actively recruit minority populations by partnering with their MOTA programs, using personal and professional connections in their communities and working with the faith-based communities, and using minority activities that are being put on by others to access minority populations. State Tobacco program staff indicated that while Local Health Officers and MOTA initially had difficulties working together to ensure minority representation on coalitions, that has since improved, and the MOTA program has grown in sophistication.

3.2.2.3. Outreach Barriers

Although many of the local Tobacco program coordinators indicated that MOTA assists them in recruiting minorities onto their coalitions, some indicated that they do not have a good sense of what their local MOTA program does, or is expected to do in their community. Because of their lack of understanding of the MOTA program, they do not know how to best work with their MOTA vendors to increase minority outreach in their communities. A few programs indicated that MOTA does not view the local program as a partner, which hinders relationship building and coordinator between the local program and the MOTA grantee. State level Tobacco program staff indicated that they are aware that county-level satisfaction with MOTA has been mixed, with some counties having positive relationships with their MOTA contractors and some being unsatisfied.

3.2.3. What Changes, if any, Should be made Regarding Minority Outreach and Participation in the CRFP Tobacco Program?

3.2.3.1. Overview

Local programs are doing a good job of reaching minorities in their jurisdictions. However, programs would benefit from having a better understanding of the purpose and expectations of their local MOTA programs. In jurisdictions where minority populations comprise a small proportion of their communities, it is especially difficult to provide outreach. State level Tobacco Program suggested that having local

programs develop disparities plans may help them to focus their programs to more appropriately target the populations most in need within their jurisdictions.

3.2.3.2. Local Tobacco Program Coordinators Suggestions

Based on the survey responses from the Tobacco coordinators, there could be better coordination or communication between the local MOTA programs and the local Tobacco programs, as the Tobacco program coordinators indicated neutral feelings toward the community outreach and coalition work that MOTA provides for them. It is unclear what, exactly, the local programs are expecting from the MOTA programs that the MOTA programs are not providing but it is important to ensure that the local program expectations of the MOTA grantees are in line with the State level expectations. From the perspective of MOTA grantees, local program outreach efforts are satisfactory, minority issues are generally included on coalition agendas, and active participation is encouraged at coalition meetings.

Tobacco program coordinators that have a good understanding and relationship with their MOTA programs indicated that MOTA is an important part of their outreach to minority communities. However, the main thing that both Tobacco coordinators and local health officers indicated would be helpful for them in improving minority outreach and participation for their programs is better communication with and understanding of the MOTA program. Because some coordinators are unsure of what the function of MOTA should be in their communities, they are also unsure of how best to work with them and coordinate with them to increase minority outreach. Many coordinators indicated that they do not see any need for changes in the minority outreach and participation for their local Tobacco programs. Some indicated that they received training on outreach to African American and Hispanic/Latino populations during regional meetings held by DHMH, which were very helpful to them. A few indicated that because the minority populations comprise such a small percentage of their communities, it is difficult to target some minorities. This concern appears to be particularly true with respect to Hispanic/Latino and Native American populations within some communities.

3.2.3.3. DHMH Tobacco Program Staff Suggestions

From the State program staff perspective, there are several recommendations for improving minority outreach and participation in the Tobacco program. It was suggested that the State can refocus the grant requirements around the four areas of the CDC logic model, and emphasize targeting according to the CDC recommendations. It was suggested that if the State provided local programs with guidance and skills through training and best practices, and subsequently allowing the locals to have more control over their programs, the local programs would have a better framework with which to focus their targeting efforts.

State CRFP Tobacco staff also suggested that it would be helpful to have local programs develop disparities plans that reflect the community needs and local capacities to accomplish outreach-related goals. Gaining this information, as well as using the newly formed State-level work group as a means for getting greater input and representation from the locals could ensure that the plans for minority targeting are appropriate for each jurisdiction.

Finally, State level staff suggested that reviewing and improving hiring practices at the local level may promote better outreach. For example, local programs should look to hire or contract expertise from within their communities. It was suggested that hiring more diverse staff within health departments in order to provide minorities with allies and supporters who can advocate on their behalf – perhaps have MOTA encourage minorities to apply for health department positions.

3.3 How well did the Local Community Health Coalitions Work?

3.3.1. To what Extent did the Local Health Coalitions Reflect the Diversity of Each Jurisdiction?

3.3.1.1. Overview

Most of the coalition lists for local Tobacco programs included information about the race and ethnicity of each coalition member. To examine the extent to which the coalitions represented the diversity of their jurisdictions, racial diversity of the coalition as a proportion of coalition members was compared to the racial diversity of each program's jurisdiction.

The most highly represented races/ethnicities among Tobacco coalitions members were White and African American. This did not change from FY2002 to FY2006. Overall, the representation of African Americans on Tobacco coalitions is similar to their representation in the State. Coalition representation of Hispanic or Latinos was lower than that in the State in FY2002, but subsequently has been at or above the State representative proportion. Representation of Asians on Tobacco coalitions reached a proportion similar to the State's in FY2006. Native American representation has been consistently higher than the State proportion in the population.

3.3.1.2. Coalition Representation

The most recent U.S. Census Bureau data that offer a complete breakdown of racial/ethnic backgrounds in each of Maryland's 24 jurisdictions is from 2000. These data were used in this section. Included with the proposal documents for each grant cycle, most local Tobacco programs included a coalition list that indicated each member's race and ethnicity. This information was used to ascertain the racial diversity of each tobacco coalition over time.

Across Maryland, tobacco coalition memberships show ethnic and racial diversity of memberships that are consistent with the proportion of each racial and ethnic group in the State population (Table 3-53). There is some variation between jurisdictions. The most highly represented races/ethnicities among coalition members are White and African-American. This has not changed throughout the years of observation. In most jurisdictions, there were proportionally more African-American members than that jurisdiction's African-American population. Tobacco coalitions in Allegany, Carroll, and Talbot Counties saw an increase in the proportion of African-American members from 2002 to 2006. The proportion of African-American members in most other counties has remained relatively stable from 2002 to 2006.

In 2006, 16 coalitions had Hispanic/Latino members. In these jurisdictions, the proportion of Hispanic/Latino members in tobacco coalitions was typically higher than the percentage of Hispanic/Latino members of the jurisdiction's population. In general, except for few fluctuations, the representation of the Hispanic/Latino population among coalition membership has been stable throughout the years. In FY2006, 11 coalitions had Asian American members and four coalitions had Native American members. Participation of either group has not changed substantially since 2002 (see Tables B-43 through B-47 in Appendix B).

Table 3-53. Race/Ethnic Makeup of Tobacco Coalitions by Race/Ethnicity, Fiscal Year, and Census

Race/Ethnicity	FY2002	FY2003	FY2004	FY2005	FY2006	Census
African American	34.0%	31.3%	32.4%	36.2%	30.8%	27.9%
Hispanic/Latino	2.5%	5.6%	4.3%	4.2%	4.8%	4.3%
Asian	1.9%	2.7%	3.6%	3.2%	4.2%	4.0%
Native American	0.4%	0.5%	0.9%	0.6%	0.6%	0.3%
Total number of coalition	1,242	1,229	1,025	1,310	831	

Race/Ethnicity	FY2002	FY2003	FY2004	FY2005	FY2006	Census
members						
Number of coalition members indicating race	1,197	1,168	959	1,233	775	

Some coalition lists did not indicate the racial breakdown of coalition members. Note that the calculations used in this section include only members for whom race/ethnicity was indicated. Therefore, the total number of coalition members on any particular coalition may be greater than the number of coalition members included in this section.

To examine efforts to maintain racially and ethnically diverse representation on tobacco coalitions that is proportionate at both the jurisdiction and the State level, the in-depth interviews included a section on minority outreach and participation. According to the Tobacco program coordinators, almost all local Tobacco programs attempt to actively recruit minorities to join their coalitions. The most common activities indicated by Tobacco coordinators to recruit minority coalition members were working with MOTA, using personal or professional connections to make contacts in minority communities, using the assistance of faith-based organizations, and using other program minority outreach activities as a venue for soliciting minority coalition membership. A few coordinators indicated that they routinely ask their current coalition members to invite people from their communities and from their organizations to join the coalitions. Other ways in which coordinators indicated that they are attempting to recruit minority coalition members included creating pamphlets or handouts to raise awareness about the coalitions, offering trainings or technical assistance sessions to minority organizations, and requiring individuals who receive grant funding through the program to attend the coalition meetings.

3.3.2. What was the Extent of the Active Participation by Community Organizations on the Local Tobacco Coalitions?

3.3.2.1 Overview

Most of the local Tobacco coalitions meet at least four times per year, providing sufficient opportunity for coalition members to be active. Most of the coalition members that responded to the Coalition Members Survey indicated that they attended at least one coalition meeting in the 12 months prior to the survey. The coalitions are comprised of individuals from multiple community sectors. According to the local Tobacco program coordinators, the main reasons that coalition members joined the coalitions was because they were interested in receiving funding or that they have a vested interest in tobacco control and prevention.

3.3.2.2. Local Meeting Frequency and Publicity

A review of a sample of the available meeting notes and sign-in sheets from tobacco and cancer coalition meetings revealed that active participation of coalition members varies from county to county. Because coalitions do not all follow a prescribed template for recording and presenting their meeting notes and because coalitions are not required to submit meeting notes for each coalition meeting, a systematic review of the meeting notes is difficult. From the brief review, it is clear that the meetings involve active participation from many of the attendees and that discussion about planning and implementing goal-related activities are common themes in the meetings.

Results from the surveys conducted with Tobacco coalition coordinators indicated that all of the local Tobacco programs hold both coalition and subcommittee meetings. Almost all of the coalitions (87.0%) meet at least four times per year, with the remainder meeting three (8.7%) or two (4.3%) times per year. Similarly, most subcommittees (78.3%) meet at least four times per year, with a few meeting three (4.3%), two (13.0%), or one (4.3%) times per year. Most of the local Tobacco coalition members (90.8%)

respondents to the members survey indicated that their coalitions meet at least four times per year, and approximately half (47.5%) of members belonging to jurisdictions with four or more meetings per year indicated that they go to all of the meetings. Most (89.3%) of respondents indicated that they went to at least one meeting in the past year (see Tables A-3 and A-4 for jurisdiction level detail)

Local Tobacco programs engage in several activities to publicize coalition meetings and to remind coalition members of upcoming meetings (Table 3-54). In fact, only a small proportion of local Tobacco programs do not publicize their coalition meetings in some way (13.0%). The most common way in which local Tobacco programs publicize their coalition meetings is through reminders at meetings (82.6%). Word of mouth (69.6%), email or internet messages (65.2%), and mailings (65.3%) are also common ways in which tobacco coalition meetings are publicized. Some programs use public postings (21.7%) and local media (21.7%) to publicize their meetings and a small proportion of programs publicize their meetings via telephone calls (4.3%) and during outreach events (4.3%).

The most common source of reminders to coalition members about upcoming meetings is through reminders at meetings (91.3%), but email (82.6%) and mailings (82.6%) are also common modes for reminders. More than half of local Tobacco programs send reminders through word of mouth (52.2%) and by telephone (52.2%). Finally, a small proportion of local Tobacco programs use public postings (13.0%) and local media (13.0%) as a way to remind coalition members of upcoming meetings. With the exceptions of word of mouth and telephone reminders, the pattern of results was similar among coalition members' responses to the question of how they are reminded of upcoming coalition meetings (See Table A-5 in Appendix A for jurisdiction-level detail).

Table 3-54. Sources of Meeting Publicity and Meeting Reminders for Tobacco Coalition Meetings

Sources for Providing Meeting Information	Coalition Coordinators		Coalition Members
	Publicity (N = 23)	Reminders (N = 23)	Reminders (N = 252)
Email/Internet	65.2%	82.6%	70.6%
Reminded at meetings	82.6%	91.3%	46.0%
Mailing	65.2%	82.6%	44.4%
Public Posting/Bulletin Board	21.7%	13.0%	3.2%
Word of Mouth	69.6%	52.2%	17.9%
Local Media	21.7%	13.0%	2.4%
Telephone	4.3%	52.2%	10.7%
Other	4.3%	0.0%	1.2%
Meetings are not publicized	13.0%	—	—

Source: Local Cancer Coordinators Survey and Local Coalition Members Survey

Tobacco program coordinators expressed satisfaction with minority participation on their local coalitions ($M = 3.83$). Only a small percent (8.7%) indicated dissatisfaction with minority coalition involvement. However, coordinators expressed neutrality in their satisfaction with the assistance they receive from the MOTA program to provide outreach to minority populations in their jurisdictions ($M = 3.33$) and to maintain and ethnically diverse coalition ($M = 2.93$). While just over one-half (53.3%) of respondents indicated that they are satisfied with assistance they receive from MOTA in providing outreach, fewer than half (40.0%) indicated satisfaction with MOTA's assistance in maintaining an ethnically and racially diverse coalition, and a slightly larger proportion (46.6%) indicated dissatisfaction with this issue. Overall, Tobacco coordinators expressed satisfaction with the CRF funded minority initiatives ($M = 3.65$) and minority programs ($M = 3.70$) in their jurisdictions.

3.3.2.3. Community Representation on Coalitions

Information regarding participation of coalition members was required in the grant proposals for both Tobacco and Cancer Program grants. This information was reviewed by the evaluation team to determine whether specific information about coalition member participation could be ascertained from this data source. Although the grantees included this information in their grant proposals, the specificity of participation cannot be assessed through this source. For example, all grantees indicated that coalition members are involved in either planning or implementing program activities, or both, but the extent of participation cannot be determined. Furthermore, the community sectors represented by the active participants (i.e., faith-based organization; community-based organization) cannot be determined through a review of the grant proposal information. Therefore, Tobacco program coordinators were surveyed about their coalition make-up and whether specific community sectors are represented and active on their local Tobacco coalitions.

By including coalition members from different sectors of the community, programs can leverage support from within the communities by providing access to populations and increasing credibility of the programs within those sectors of the community. The size of the coalition may give some information about the amount of support and assistance being provided to the local programs. The total number of members in local tobacco coalitions declined from FY2002 to FY2006. However, in the earlier years, programs included both active and inactive members on their coalition lists and were instructed to remove all inactive members and to regularly update their lists after FY2003. This may account for the apparent decline in membership. Additionally, much of the decline can be attributed to the decrease in membership within Baltimore City's tobacco coalition (see Table B-48 in Appendix B).

There were differences in coalition membership representation from different sectors of the community. Community sectors represented on the local Tobacco coalitions included members from health sectors, local government, community-based organizations, faith-based organizations, law enforcement, media, and education. To examine whether the coalition makeup affects implementation of the local Tobacco programs, the quarterly subvendor reports submitted by the jurisdictions were examined against the coalition membership lists. This examination yielded no discernable pattern of subvendor funding based upon coalition membership (see Tables B-49 thru B-58 in Appendix B).

According to the coordinator surveys, Tobacco coalitions are comprised of individuals from several different community segments. With the exception of media representatives on coalitions, if representatives are on the coalition, they tend to be active members. Aside from the segment representatives listed in Table 3-55, coalition members representing cancer survivors, citizen advocates, daycare, dentists, and MOTA were mentioned.

The coalition members that responded to the Coalition Members Survey indicated what organizations they represented. According to their responses, almost all of the jurisdictions have coalition representation from non-profit organizations and local businesses. However, the percent of jurisdictions that had respondents from each of the other categories of representation ranged from zero (media representation) to 70.8% (local health department). If it is assumed that members who are active on the coalitions would be likely to respond to a survey about their participation, then the levels of activity assumed by local coordinators may be overstated (see Table A-6 for jurisdiction level detail).

Table 3-55. Tobacco Coalition Member Representation and Activity on Coalition

Community Segment	Coordinators Indicating Represented on Coalition (N = 23)	Coordinators Indicating Active on Coalition	Jurisdictions with Representative Survey Respondent (N = 24)
Health care	100.0%	100.0%	66.7%
Local health department	100.0%	100.0%	70.8%
Schools K-12	91.3%	90.5%	59.3%
Faith-based organizations	91.3%	95.2%	66.7%
Hospitals	87.0%	95.0%	—
Non-profit organizations	87.0%	95.0%	95.8%
Law enforcement	73.9%	82.4%	41.7%
Youth organizations	69.6%	93.8%	25.0%
Substance abuse agencies	69.6%	87.5%	37.5%
Colleges/universities	69.6%	87.5%	62.5%
Grassroots organizations	60.9%	92.9%	62.5%
Community-based organizations	56.5%	100.0%	62.5%
Local elected officials or government	45.8%	63.6%	33.3%
Physicians	39.1%	88.9%	—
Local businesses	30.4%	85.7%	83.3%
Other (specify)	25.0%	—	62.5%
Media	13.0%	33.3%	0.0%

During in-depth interviews, Tobacco program coordinators were asked why they think individuals join their local health Tobacco coalitions. They indicated four main reasons why people join their coalitions. The most common reason that they indicated was that people join because they are receiving, or are interested in receiving, funding through the CRF mini-grant process. An almost equally common response was that members join because they are personally interested in tobacco control as former smokers or cancer survivors. Many individuals join because they are community advocates or they work for organizations with an interest in tobacco control and prevention.

Local CRFP Tobacco coalition members were asked about how they were invited to join their coalitions on the Coalition Members Survey. The most common responses were that members were recruited to join by their own organizations (32.5%) or by the local health department (32.5%). Some members (11.6%) were not recruited to the coalition, but belong as part of their job descriptions. MOTA recruited 7.6% and other coalition members recruited 4.8% of the survey respondents. Other means of joining the local coalition included being a part of another coalition (5.2%), recruitment by a relative or friend (1.6%), and other/unspecified (4.0%).

3.3.3. To what Extent did the Local Health Coalitions participate in the Development of Tobacco Control Efforts?

3.3.3.1. Overview

Local Tobacco coalition members contribute to local program planning by providing ideas and suggestions, helping to create the annual plans, and providing important links to the community for the local Tobacco programs.

3.3.3.2. Local Program Coordinator Perspective

In response to questions regarding the input and importance of coalition members on the local Tobacco programs, most Tobacco program coordinators indicated that one of the contributions of the local coalition members is assistance in program planning. Furthermore, they indicated that the links that coalition members have to the community allow them to provide information about the specific needs of their communities and to help to construct the annual plans accordingly. Most Tobacco program coordinators indicated that their coalitions are active in three main ways: providing suggestions and ideas for the program, helping to create the annual plan, and providing links and connections to the community. As members of the communities that their programs serve, the coalition members are able to provide input about the needs of the communities from an important perspective. A few coordinators indicated that coalition members provide a way for the programs to be active advocates that they would not be able to be as a government entity. A few also suggested that the coalition members provide a means for programmatic consistency, as they remain on the coalitions over time, and that they recruit new members onto the coalitions to ensure that the coalitions are sustained over time.

3.3.3.3. Local Coalition Members Perspective

Tobacco coalition members were given the opportunity to provide their perspectives on the extent of their activity and contribution to the local Tobacco coalitions. Regarding coalition meetings, Tobacco coalition members expressed satisfaction with the agendas and minutes of coalition meetings (M=4.37), as well as with the format (M=4.27), frequency (M=4.28), and time of day of coalition meetings (M=4.20). Members also expressed satisfaction with the capacity of the meeting rooms (M=4.35), the way in which they are informed about meetings (M=4.49), the geographic location of the meetings (M=4.47), and the efforts of the local programs to provide outreach to minority communities (M=4.32) (See Table A-9 in Appendix A).

When asked to indicate their level of satisfaction with general member contributions to the coalition meetings and the local Tobacco programs, coalition member respondents expressed satisfaction that coalition members contribute items to the meeting agendas (M=4.12) and that they are encouraged by the chairperson to discuss those items (M=4.40). They were satisfied that members are able to provide input into developing CRF plans each fiscal year (M=4.18) and for designing local programs (M=4.06), as well as with the fact that they are able to provide input during the implementation of local programs (M=4.07). Coalition members responded that they were satisfied that members' ideas are incorporated into the local program plan (M=4.16), its design (M=4.07), and implementation (M=4.10). When asked how satisfied they were that the mission, vision, and value of the program is clearly communicated to members, respondents indicated that they were satisfied (M=4.27) (See Table A-10 in Appendix A).

Regarding coalition members' personal contribution to the coalition meetings and the Tobacco program, members expressed satisfaction with the level to which they have personally contributed items to the meeting agendas (M=3.80) and have participated in meetings by speaking on the agenda items (M=4.06). They feel satisfied with the degree to which their contributions are taken into account for the planning (M=3.95), design (M=3.75), and implementation (M=3.78) of local CRF Tobacco programs (See Table A-11 in Table A).

3.3.3.4. Local Coalition Meeting Observation

The evaluation team observed a sample of six Tobacco coalition meetings, including two that were combined Tobacco and Cancer coalition meetings. In general, the coalition members who attended the meetings were active in the presentations and discussions that took place. During most meetings, coalition members were invited to discuss activities being carried out by their organizations, with each coalition member presenting information about what they or their organizations had accomplished since the prior

meeting. In some cases, coalition members were invited to brainstorm how to address an issue or how to implement a plan. Where planning issues were on the agenda, coalition members were active in brainstorming ideas and making suggestions. All meetings allowed for questions and answers, and exchanges of ideas between coalition members.

3.3.4. What Factors Contributed to, or Hindered, the Effectiveness of the Local Tobacco Health Coalitions?

3.3.4.1. Overview

Most of the local Tobacco coordinators indicated that their coalition members are active in many aspects of the programs, from planning and generating ideas through implementation, and that they are an integral and important part of the local programs. The members' connections with the community, the training and guidance that they receive from the local health departments, and the commitment that they have to supporting tobacco control in Maryland are the most important facilitators for the coalitions. The time constraints that make it difficult for coalition members to take more active leadership roles, and the difficulty in finding meeting times to accommodate all of the members of the coalition are the biggest barriers.

3.3.4.2. Local Tobacco Health Coalition Facilitators

During in-depth interviews, some of the local Tobacco program coordinators discussed the importance of the coalitions to the existence of the local Tobacco programs. The most often stated facilitator for enhancing the effectiveness of the local Tobacco coalitions is the connection that the coalition members have with the communities. Specifically, it was suggested that the coalition members know how to serve the communities because they are part of the communities. Additionally, they provide a connection between the community members, community organizations, and the program. Some local coordinators indicated that the training and guidance that the local health departments have provided to their coalition members make them better equipped to provide the activities and services that they implement. Some coordinators also indicated that the coalition members' commitment to the cause makes them especially effective in promoting the Program's goals. A few local coordinators mentioned that the funding that coalition members' organizations receive is an important facilitator for coalition functioning.

State CRFP Tobacco staff were asked to describe any factors that they thought contributed to the effectiveness of the local Tobacco health coalitions. From their perspective, sharing updated information, such as sharing data or providing the latest content and event-related information with local program staff and coalitions helps the coalitions to function. It was noted that MOTA has been helpful in the progress of coalitions.

3.3.4.3. Local Tobacco Health Coalition Barriers

While the coalitions provide useful input and during interviews, many coordinators indicated that the programs would not be able to exist without their coalitions, factors such as time constraints and inabilities to find times for meetings that suit everyone were mentioned as barriers for the coalitions. While the ideas and input from coalition members are useful, some coordinators indicated that they would like for their coalition members to take more active leadership roles on the coalitions, but they may lack the time to be able to commit to more responsibilities. Some coordinators indicated that they would like for more community members who are not associated with organizations receiving funding and for more youth to be active on their coalitions. They indicated that people who are active volunteers, and might be likely to join the coalitions may lack time to commit to the cause. Furthermore, it is difficult for coordinators to find coalition meeting times that can accommodate school schedules of youth who might be interested in joining the coalitions.

State level Tobacco Program staff discussed several factors that they thought hindered the effectiveness of the local Tobacco health coalitions. Half stated that they thought the effectiveness and level of activity of local coalitions depends on the vision of the coalition champion and varies from location to location. Half of the Tobacco program respondents made related comments specific to the presence of existing coalitions in local communities. They said that coalitions want to do advocacy and that while some existing coalitions did not want to become a part of a program that would put them under the auspices of the government, the existing coalitions were nonetheless frustrated by the creation of new coalitions. They added that they thought the CRFP guidelines were not clear enough about the use of existing coalitions. Another barrier mentioned included the mistrust of disparities data by locals.

3.3.5. What Changes, if any, Should be Made Regarding the Local Tobacco Health Coalitions?

3.3.5.1. Overview

The suggested coalition changes from the local perspective included having more community members not associated with organizations that receive funding on the coalitions and increased leadership roles taken on by coalition members. From the State perspective, having a funded position at local health departments to provide support to coalitions or to alternatively have one funded position that provides support to coalitions across regions would be a beneficial change to the Tobacco coalitions.

3.3.5.2. Local Program Coordinator Suggestions

There are two broad requirements for the coalitions: an advisory function and participation in the development of plans. Most Tobacco program coordinators indicated that their coalitions provide this required support, and Tobacco program coordinators appear to be generally satisfied with the makeup and functioning of their coalitions. However, a majority of Tobacco program coordinators indicated that they would like to see more community members who are not associated with organizations that receive funding through the CRFP on their coalitions, particularly youth. Some coordinators also indicated that they would like to see more leadership being taken on by the current coalition members. Some indicated that no changes are needed on the coalitions. Coordinators indicated that the relationships and training provided by the local health departments, the relationships that the coalition members have to their communities, and the commitment and interest that the coalition members have for the cause allow the coalitions to perform appropriately.

The only suggested Tobacco coalition change made by local health officers was that the coalitions would benefit from having more community members who are not associated with organizations receiving funding. However, most local health officers did not have any suggested changes for the coalitions.

3.3.5.3. DHMH Tobacco Program Staff Suggestions

Suggestions regarding ways to improve the effectiveness of local health coalitions from the State level CRFP Tobacco staff included a recommendation for having a funded position at local health departments to provide support to coalitions (such as with staffing of coalitions), or to alternatively have one funded position that provides support to coalitions across regions. Other suggestions included sharing best practices with coalitions and encouraging coalitions to access the Legal Resource Center for support.

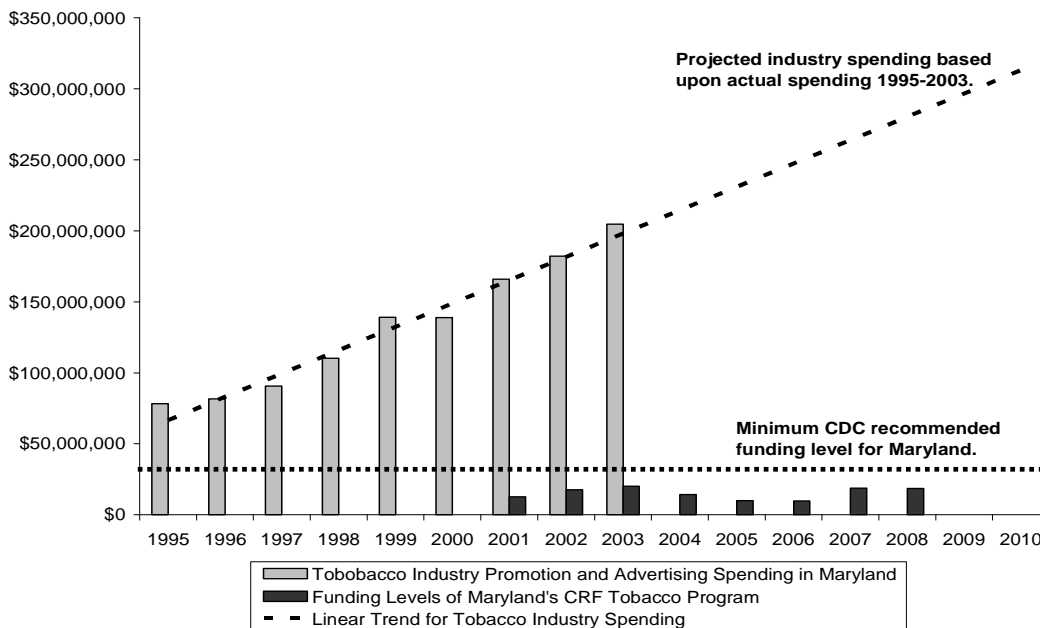
3.4. What Impact did Funding Levels for the Tobacco Local Health Programs, and the Statutory Limitations on Shifting Funding among Components Have on Program Implementation and Effectiveness?

3.4.1. To what Extent was Tobacco Program Funding Levels Adequate for the Jurisdiction to Implement the Centers for Disease Prevention and Control's "Best Practices" Model?

Maryland's tobacco control programs have been chronically under-funded. In FY2005, for instance, the budget was approximately one third of what is recommended by CDC using the lower range of recommended per capita expenditures. Although funding levels increased for FY2007, they still do not reach the CDC recommended minimums for a comprehensive statewide tobacco program. In addition, the countermarketing and media component of the CRFP Tobacco Program was cut by 95% to \$500,000 after the program began, and has not had any funds added since that time.

The CDC recommends a minimum funding level of \$30.3 million per year for a comprehensive State Tobacco program in Maryland. CRFP Tobacco funding has ranged from a high of \$20.2 million in FY2003 to a low of \$9.9 million in FY2005 and FY2006. At the same time, the tobacco industry continues to increase its expenditures to promote smoking in the State. Figure 3-18 illustrates the discrepancy in CDC recommended funding levels and actual funding levels of Maryland's CRF Tobacco Program, and contrasts the funding level against industry expenditures.

Figure 3-18. Tobacco Industry Promotion and Advertising Spending, CRF Tobacco Program Funding Levels, and CDC Recommended Funding Levels for the State of Maryland



Sources: Tobacco industry spending in Maryland – TobaccoFreeKids.org;
Funding levels of Maryland's Tobacco CRFP Program – Maryland DHMH;
Minimum CDC Recommended Funding Levels for Maryland – CDC Best Practices for Comprehensive Tobacco Control Programs

3.4.2. To what Extent did Funding Levels Support Necessary Infrastructure for the Local Tobacco Programs?

3.4.2.1. Overview

The local health component of the Tobacco Program provides funding for the four CDC Best Practice recommended elements of community-based, school-based, enforcement, and cessation. Although Tobacco program coordinators are generally satisfied with the funding levels for their programs, they do find that funding variations are a barrier to program planning and implementation. Specifically, funding inconsistencies make it difficult to maintain staff and grantees, to retain community interest in their programs, and to plan their programs appropriately. Additionally, smaller jurisdictions had difficulties hiring staff and getting plans implemented early on due their lower funding levels. Since the funding formula has changed, this is no longer an issue for smaller jurisdictions. There is some concern that a cut in funding would result in an inability for programs to maintain staff and subvendors, and to continue implementing current programs.

3.4.2.2. Local Program Staffing and Subvendor Funding

Local program staffing. Staffing of each local program was examined in terms of full-time equivalent (FTE) positions that are paid by program funds. These positions were conceptualized as either administrative positions, including support positions such as office staff, clerks and administrative officers; and program positions, including positions such as outreach workers and supervisors. As shown in Table 3-56, between FY2002 and FY2005, there were reductions in FTEs for the local Tobacco programs, with the reduction appearing less evident within the cessation element of the program. From FY2005 to FY2006, there was an increase in staffing under the school and cessation based elements of the program. See Table B-59 in Appendix B for jurisdiction-level details.

Table 3-56. Composition of Local Tobacco Program Staffing by Fiscal Year

Local Program Composition	FY2002	FY2003	FY2004	FY2005	FY2006
Community Based	27.46	24.07	25.29	23.71	24.78
School Based	12.19	11.51	10.60	9.57	12.14
Enforcement	9.77	8.41	9.95	7.86	8.02
Cessation	7.54	8.05	8.49	7.30	8.29
Administration	4.29	3.61	2.16	2.84	1.94
Total Full Time Equivalent Staff	61.25	55.66	56.50	51.28	55.98

Source: Annual Tobacco Grant Proposals

Subvendor funding. Each jurisdiction funds subvendors to conduct activities under the four elements of the local programs. Subvendors report their activities on a quarterly basis, and the local programs submit quarterly subvendor reports to DHMH. These reports were reviewed to examine subvendor funding and activities. As shown in Table 3-57, the number of subvendors to whom funding was awarded within each of the program elements remained relatively constant over time. Community-based programs consistently had the largest number of subvendors funded, followed by school-based programs. Cessation programs and enforcement programs funded the same number of subvendors in FY2005, but the number of enforcement program subvendors funded in all prior years was the lowest of the elements.

Table 3-57. Number of Subvenders Funded by Element and Fiscal Year

Element	FY2002	FY2003	FY2004	FY2005	FY2006*
Community-Based Programs	121	97	135	133	131
School-Based Programs	82	82	103	101	77
Cessation Programs	26	33	30	20	19
Enforcement Programs	22	17	16	20	28
Total	251	229	284	274	275**

* = Based on 23 Jurisdictions

** = Note that 20 subvenders had no element specification

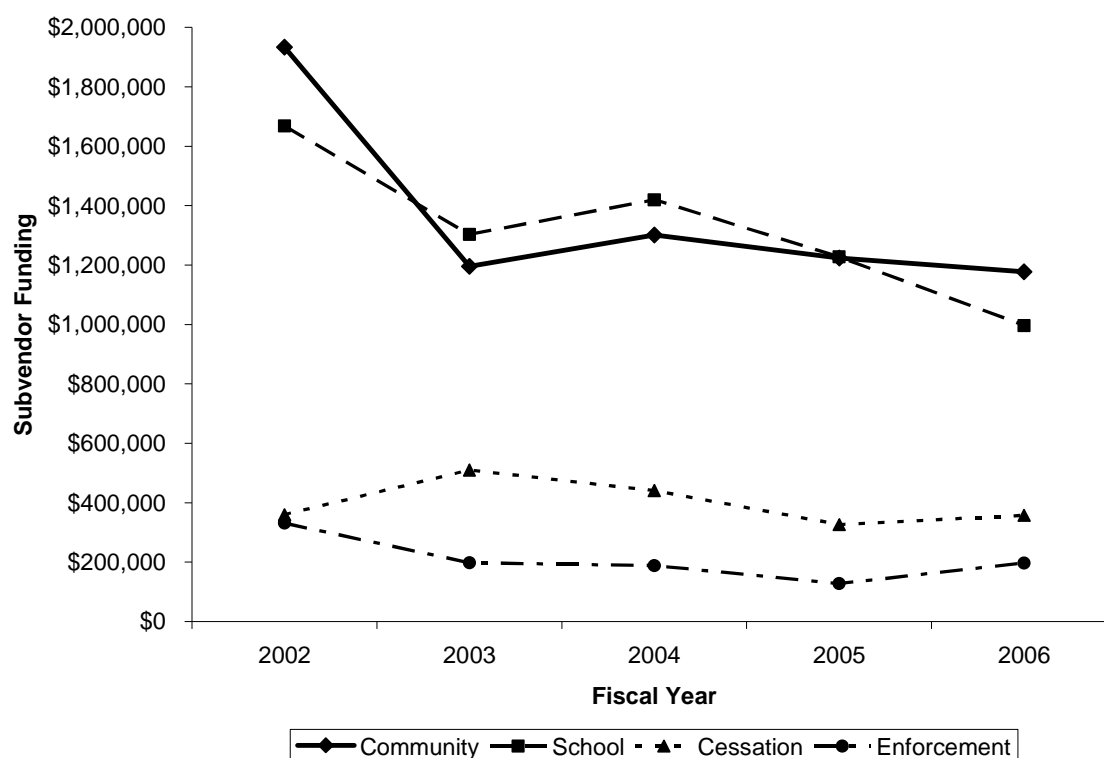
Source: Annual Tobacco Program Subvendor Reports

Regardless of funding variations, as shown in Table 3-58, the proportion of local funding that went to subvenders under the school-based and community-based elements were consistently the highest. Enforcement subvenders received the smallest proportion of funding in all years. As illustrated in Figure 3-19, subvendor funding levels have been relatively stable within each funding element, with the largest variations occurring for the community and school-based elements from year to year.

Table 3-58. Proportion of Local Public Health Funding to Subvenders by Element and Fiscal Year

Element	FY2002	FY2003	FY2004	FY2005	FY2006
Community-Based Programs	21.0%	13.0%	16.3%	17.6%	16.9%
School-Based Programs	18.1%	14.1%	17.7%	17.6%	14.3%
Cessation Programs	3.9%	5.5%	5.5%	4.7%	5.1%
Enforcement Programs	3.6%	2.1%	2.4%	1.8%	2.8%
Total	46.5%	34.8%	41.9%	41.7%	39.2%

Figure 3-19. Subvendor Funding Levels by Element and Fiscal Year



Source: Annual subvendor reports

3.4.2.3 Funding Barriers

Based on responses to the coordinator survey, Tobacco program coordinators are satisfied with the funding they have received for implementing their programs. Although satisfaction with the level of program funding was lower for FY2006 ($M = 3.70$) than for FY2007 ($M = 4.43$), most respondents (69.6%) indicated that they were satisfied with the level of funding they received in FY2006. This proportion increased, with almost all respondents (91.3%) indicating satisfaction with funding levels for FY2007. However, when asked specifically whether funding barriers are an issue for the programs, a majority of coordinators confirmed that they are. Specifically, coordinators find that funding inconsistencies make it difficult to maintain staff and grantees, to retain community interest in their programs, and to plan their programs appropriately. Additionally, when funding is delayed, mini-grantees and subvendors are not able to begin implementing their activities, and have to rush to complete tasks within the revised timeframes. However, some coordinators indicated that funding is not an issue for them, while others indicated that they simply need more funding.

Even without being asked specifically about funding as a barrier to their local Tobacco programs, funding issues were the most common issues brought up by local health officers during their interviews. Local health officers most commonly identified funding fluctuations as barriers to their local Tobacco programs. Specifically, they indicated that fluctuations in funding make it difficult for them to maintain full time staff for their programs, and to maintain interest among subvendors. Some local health officers indicated that the lack in flexibility for how funds can be spent by local programs makes it difficult for local programs to fund interventions and activities that they think will be effective, but that don't fall neatly into the funding categories.

Local health officers were asked specifically whether funding issues affect the implementation of their local Tobacco programs. A few stated that limited funding affects staffing, but that this was more of a problem early in the program and among smaller jurisdictions. With the change in the funding formula for small jurisdictions, the issues around lack of funding appear to have been alleviated. Most local health officers indicated that their current funding levels are sufficient, and that the recent increase in funding has been helpful. Conversely, some suggested that funding cuts would be detrimental in that they would affect the continuity of the programs and the ability to maintain subvendors to implement the program activities.

State DHMH Tobacco Program staff feel that the funding for countermarketing and media component of the Program and for the Maryland Quitline has been inadequate. Funding for the countermarketing and media component of the Program was cut by 95% after the start of the Program, and has remained well below the CDC recommended funding level since the Program's inception.

3.4.2.4. Grant Funding Requirements Barriers

The most often indicated barrier associated with the grant funding requirements for the Tobacco Program is that they create funding formulas that are too prescriptive. Most coordinators suggested this to be the case, and many feel that the inflexibility of the grant funding requirements keep them from being able to create programs that fully target the particular issues in their communities.

3.4.2.5. Administrative Cost Limitation Barriers

Programs have a 7% administrative cost cap built into their budgets. Tobacco program coordinators were asked whether this administrative cost cap creates a barrier for them. While the majority of coordinators indicated that the administrative cost cap is not a barrier for them, a few mentioned that it creates an issue by reducing the number of staff that they can put on the payroll to run and maintain their programs. A few

local health officers also mentioned that the cap on administrative spending is an obstacle, especially given the reporting requirements for the local Tobacco programs.

3.4.3. What Changes, if any, Should be Made with Regard to the Funding Levels and Statutory Requirements for Tobacco?

As discussed earlier, Tobacco program coordinators appear to be satisfied with the current level of funding available for their programs. They would like to see less variability in funding levels from year to year, and a reduction in the time between application for funds and distribution of funds for the local programs. Both of these issues have been indicated as barriers to program implementation in that they create difficulties in proactive planning and in maintaining staff and subvendors.

Tobacco program coordinators would also like to have more discretion in how to allocate funding across their program elements. Many indicated that they find the current funding allocation formulas to be too prescriptive, and that this prescribed approach limits the abilities of local programs to respond to local needs. Program coordinators suggested easing the restrictions on how funds are allocated among the program elements, allowing programs to determine the relative needs for each element within their communities. This would be particularly useful when programs cannot find enough satisfactory subvendors to fund under a particular element, as well as for communities where there are a limited number of schools or hospitals.

The most common recommended change to the Tobacco Program made by local health officers was to make the funding less prescriptive. It was suggested that allowing the local programs to determine how to allocate their funding will enable programs to better implement interventions and activities that are based on community needs. Furthermore, it would enable programs to shift funds in situations where there are limited requestors within a particular funding element.

Although many local health officers indicated that they currently have sufficient funding for their programs, when asked what changes should be made to the Tobacco Program, some indicated that they would like to see an increase in funds. It was posited that more funds will enable a greater number of activities and interventions to be implemented by the local programs.

The State CRFP Tobacco Program has been working with the local Tobacco programs to address funding issues. The State instituted, and over time has increased, base funding for the local health component of the Tobacco Program, upon which funds are added based on the number of smokers in each jurisdiction. Additionally, the State has gone from enforcing a fixed funding percentage per element to allowing funding ranges within each element, giving the jurisdictions some latitude in how they ultimately allocate their funds, while still ensuring that each of the funding elements (community-based, school-based, enforcement, and cessation) are funded within each jurisdiction (Table 3-59).

Table 3-59. Changes in Base Funding and Element Allocation Allowances by Fiscal Year

Element	2001	2002	2003	2004	2005	2006	2007
Base Funding	\$0	\$0	\$0	\$75,000	\$75,000	\$75,000	\$150,000
Community-based	43%	43%	43%	40%-46%	40%-46%	38%-48%	38%-48%
School-based	32%	32%	32%	29%-35%	29%-35%	27%-37%	27%-37%
Enforcement	11%	11%	11%	8%-14%	8%-14%	6%-16%	6%-16%
Cessation	14%	14%	14%	11%-17%	11%-17%	9%-19%	9%-19%

Chapter 4: Cancer Program Findings

4.1: To what extent were Cancer Goals Met?

4.1.1 To what Extent were the Cancer Managing for Results (MFR) Reports (Benchmarks) and Short- and Long-Term Goals Met?

4.1.1.1. Overview

In FY2001, the CRFP's Cancer Program identified a series of goals. Each goal was associated with objectives and measurable outcomes. The outcome expectations were adjusted annually for each upcoming year, creating rolling goals for each outcome over time. Goals were estimated for many outcomes for 2010. Some objectives and associated outcomes were not reflected for each year's MFR reports. An overview of the goals and accomplishments is presented below. This overview is followed by detailed findings for each goal.

Goal 1. To reduce overall cancer mortality in Maryland. Overall cancer mortality rates in Maryland have declined from a rate of 211.0 per 100,000 in 1999 to a rate of 187.9 in 2005 (MD Vital Statistics). The decline appears to have leveled off from 2004 to 2005. This may be due to an observed increase in overall cancer mortality among Whites that is counterbalanced by a continued decrease among African Americans.

Goal 2. To reduce disparities in cancer mortality between ethnic minorities and Whites. The cancer mortality rate ratio between Whites and African Americans in Maryland was 1.24 in CY2001. The State set goals to reduce the cancer death ratio to 1.07 in CY2004. This goal has not been achieved. However, the mortality ratio between Whites and African Americans decreased to 1.12 by CY2005

To support the goal of reducing disparities, statewide goals for provision of no-cost screenings to minorities were set. For most years in which screening goals were established, each goal was met or exceeded. Provision of colorectal cancer screening to minorities exceeded the annual goals for all years but FY2006. The breast cancer screening goal was exceeded each year. With the exception of FY2003 (when the screening goal was set rather high), provision of prostate cancer screenings to minorities exceeded the statewide goals each year. Oral cancer and cervical cancer screening goals were only set for FY2003, both were exceeded. There have been no screening goals set for skin cancer screening.

Goal 3. To reduce mortality due to each of the targeted cancers under the local public health component of CRFP. The DHMH attempted to set goals for mortality rates for each cancer based on the available data and the estimated annual percent change. The ability to predict reductions in mortality using this methodology was somewhat mixed. The CY2003 MFR goals set for reducing mortality rates due to colorectal, prostate, and cervical were met, but those set for reducing breast, oral, and skin cancer were not.

The mortality rate from colorectal cancer declined each year from CY2001 through CY2003, and was lower than the estimated goal set for CY2003. Although mortality rates due to breast cancer decreased each year from CY2001 to CY2003, the actual rate in CY2003 was higher than the goal rate set for that year. The prostate and cervical cancer mortality rates declined each year and were lower than the goal mortality rates set for CY2003. Oral cancer mortality rates did not decline from CY2001 to CY2002, but saw a decline in CY2003. However, the oral cancer mortality rate in 2003 was higher than the goal set for that year. Skin cancer mortality rates increased from 2001 to 2002, and that increase was sustained in CY2003 resulting in a mortality rate that was higher than the goal rate for that year.

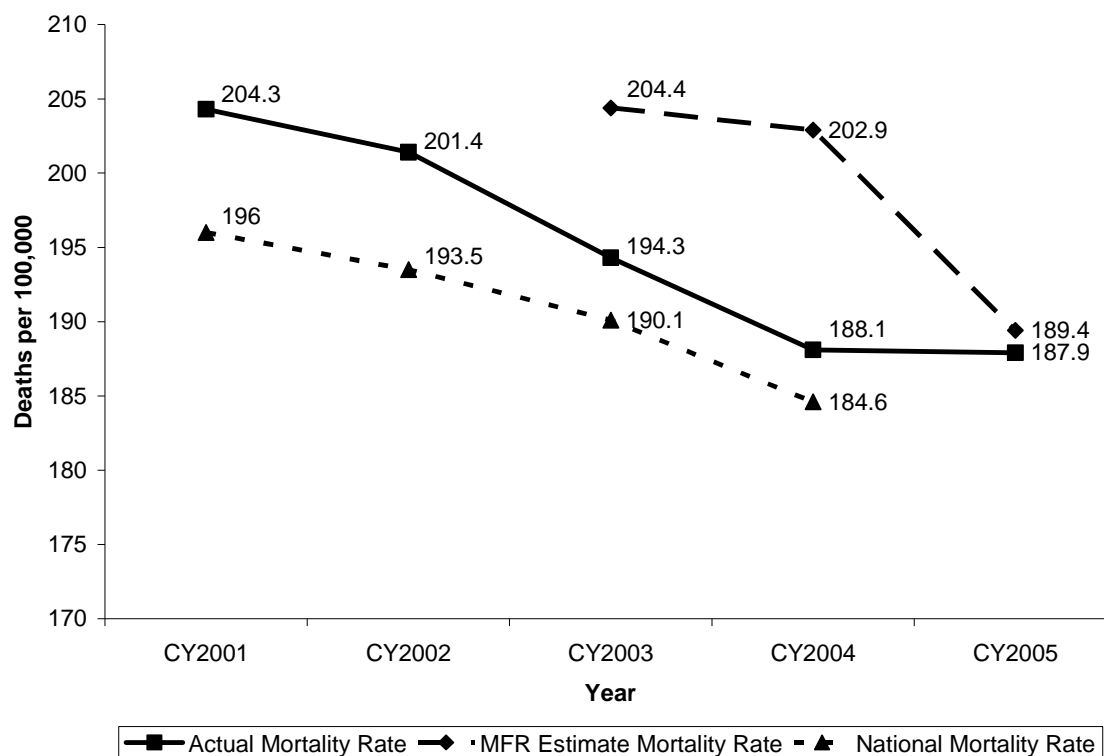
To help reduce mortality due to each of the targeted cancers, the Cancer Program provides no-cost screening services in each jurisdiction throughout the State. Although the screening services are administered at the local level, the goals for screening services represent statewide goals. Most of the screening goals that were set for each year were met or exceeded. Colorectal cancer screening provision exceeded the annual goals for all years but FY2006. The breast cancer screening goal was exceeded each year. With the exception of FY2003 (when the screening goal was set rather high), prostate cancer screenings exceeded the statewide goals each year. Oral cancer and cervical cancer screening goals were only set for FY2003, both were exceeded. There have been no screening goals set for skin cancer screening.

Goal 4: To increase access to cancer care for uninsured persons in Maryland. The number of uninsured individuals linked to treatment increased each year, and the target goals set for each year were exceeded.

4.1.1.2. Goal 1: To Reduce Overall Cancer Mortality in Maryland

Since the start of the Cancer Program, there has been a reduction in overall cancer mortality in Maryland. As shown in Figure 4-1, it was estimated that the mortality rate per 100,000 persons for any cancer would be reduced from 204.4 in CY2003 to 189.4 in CY2005, a goal that was exceeded. The overall cancer mortality rate in Maryland remained higher than the overall cancer mortality rate in the nation through 2003 (the latest national figures available), and the decline in the overall cancer mortality rate in Maryland appears to have leveled from 2004 to 2005. According to CDC Wonder and NCI Seer data, Maryland's ranking for mortality rates due to all cancers went from 15th highest in 2000 to 23rd highest in 2003, indicating that relative to other states, Maryland's overall cancer mortality rate is improving.

Figure 4-1. Maryland MFR Estimate Cancer Mortality Rates, Actual Mortality Rates, and National Mortality Rates by Calendar Year



Source: National mortality rate – CDC Vital Statistics; Maryland mortality rates – MD Vital Statistics

4.1.1.3. Goal 2: To Reduce Disparities in Cancer Mortality between Ethnic Minorities and Whites

In addition to reducing overall cancer mortality among people in Maryland, the CPEST Program aims to reduce health disparities between racial and ethnic minorities and Whites. As such, a goal was established to reduce the cancer death rate ratio between racial and ethnic minorities and Whites. As shown in Table 4-1, the disparity has been decreasing steadily since CY2003. The estimates set in the MFR reports for CY2003 forward may have been based on mortality rate ratio estimates that were lower than the actual rates, making the expected estimates lower than could have been achieved during those time periods. However, for the 2007 MFRs, the State reported an estimate to reduce the disparity due to cancer mortality to 1.18 by CY2010. This estimate has already been exceeded by CY2005.

Table 4-1. MFR Estimates and Actual Cancer Death Ratio between Blacks and Whites by Calendar Year

Measure	CY2001		CY2002		CY2003		CY2004		CY2005	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Cancer death ratio	—	1.24	—	1.24	1.08	1.25	1.07	1.18	1.09	1.12

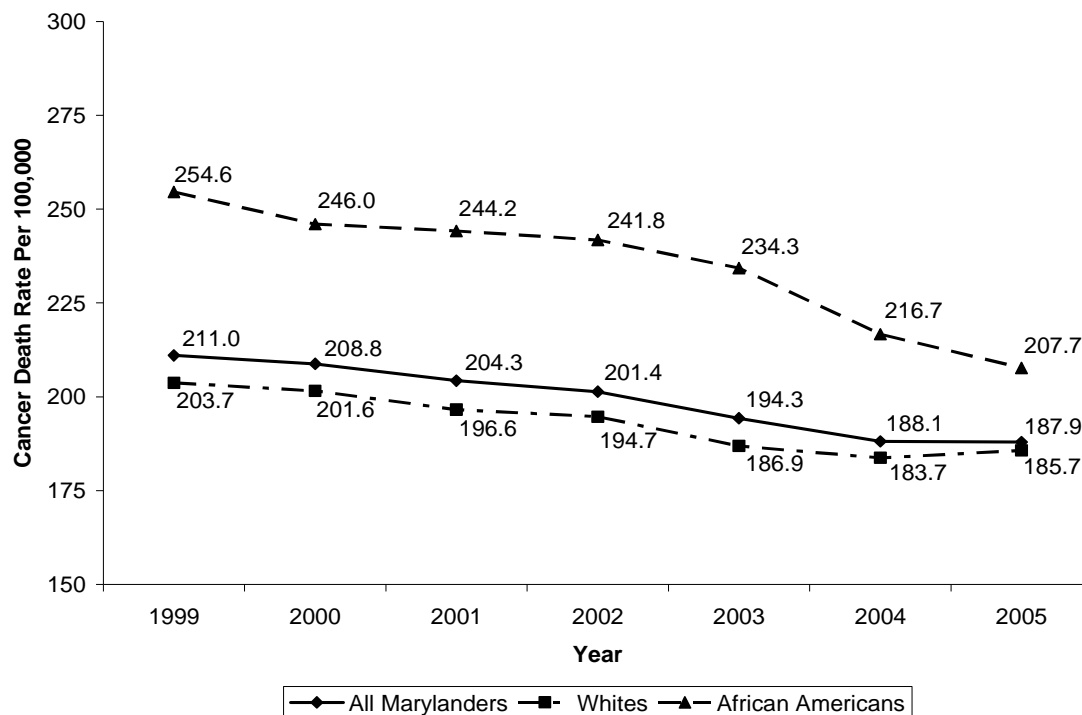
— = Estimate was not set in MFR reports

Source: Annual MFR Reports prepared by DHMH

Note: Rates are age adjusted rates per 100,000

As shown in Figure 4-2, when examining the annual death rate due to all cancers in Maryland among all Marylanders, the rate appears to be leveling out from 2004 to 2005. This may be due to a slight upturn in cancer mortality rates among Whites in Maryland. However, the trend among African Americans appears to be more favorable, with a consistent decline in mortality rates over time.

Figure 4-2. Cancer Mortality Rates among Whites, African Americans, and All Marylanders by Calendar Year from 1999 to 2005



Source: Maryland Vital Statistics

Note: Rates are age adjusted rates per 100,000

To help reduce disparities in cancer mortality, the Cancer Program established screening benchmarks for each year. Table 4-2 illustrates the actual number of minorities screened through the Cancer Program for each of the targeted cancers from FY2001 to FY2006. The majority of these benchmarks were exceeded, between FY2001 and FY2005. In FY2006, there was a reduction in the provision of cancer screenings to all individuals, and this also translated to a reduction in screenings provided to minorities. Over the course of the program, a total of 15,549 minority individuals received cancer screenings for colorectal, prostate, oral, cervical and skin cancers through the program. Additionally, 5,832 breast cancer screenings were provided to minority individuals.

Table 4-2. MFR Estimates and Actual Number of Minorities Screened Using CRFP Funds by Type of Cancer and Fiscal Year

Type of Cancer	FY2001	FY2002	FY2003		FY2004		FY2005		FY2006	
	Actual	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Colorectal	315	1,937	530	1,810	1,133	1,138	985	1,137	985	877
Breast	65*	1,304*	400	1,338*	523	1,667*	664	1,458*	664	NA
Prostate	0	298	1,960	227	198	655	532	694	532	637
Oral	9	332	1,500	1,743	—	797	—	349	—	233
Cervical	23	601	400	583	—	630	—	438	—	NA
Melanoma/skin	9	19	—	21	—	19	—	13	—	5

— = Estimate was not set in MFR reports

* = Number of screening tests performed

NA = Data not available

Source of actual screenings: DHMH Cancer Screening Database November 2006 and Breast and Cervical Cancer Database April 2006

Note: No Estimates were made for 2001 and 2002 in MFR Reports

4.1.1.4. Goal 3: To Reduce Mortality due to Each of the Targeted Cancers under the Local Public Health Component of CRFP

There have been reductions in mortality rates due to colorectal, breast, prostate, and cervical cancer each year during the course of the program. According to CDC Wonder and NCI Seer data, between CY2000 and CY2003, Maryland's ranking for colorectal cancer mortality improved from 7th highest to 24th highest in the nation. There was an overall decrease in oral cancer mortality from CY2000 to CY2003. The mortality rate from melanoma and other skin cancers increased from 2.3 in CY2001 to 2.7 in CY2003 (Table 4-3).

Table 4-3. MFR Estimates and Actual Mortality Rates by Type of Cancer

Type of Cancer	CY2001		CY2002		CY2003		CY2004		CY2005	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Colorectal	—	21.6	—	21.0	20.8	19.3	22.3	—	19.7	—
Breast	—	28.5	—	27.7	26.3	26.6	25.4	—	24.6	—
Prostate	—	34.1	—	31.9	30.2	28.4	28.7	—	25.9	—
Oral	—	3.0	—	3.0	2.7	2.8	—	—	—	—
Cervical	—	2.8	—	2.3	2.6	2.1	—	—	—	—
Melanoma/skin	—	2.3	—	2.7	2.4	2.7	—	—	—	—
All Cancers	—	204.3	—	201.4	204.4	194.3	202.9	188.1	189.4	187.9

= Estimate was not set in MFR reports or actual data was not available

Source of estimates and individual actual cancer rates: Annual MFR Reports prepared by DHMH

Source of actual all cancer rates: Maryland Vital Statistics, age adjusted to the 2000 U.S. standard population

To reduce mortality due to five of the targeted cancers, the CRFP provided funds for screening. Therefore, screening benchmarks were created for each targeted cancer. The majority of these benchmarks were exceeded for each year. FY2006 was the first year that the benchmark for colorectal cancer screenings was not met, and with the exception of prostate cancer screenings, all screenings for which data were available show decreases in FY2006. Nonetheless, from FY2001 through FY2006, a total of 31,113 individuals received screenings for colorectal, prostate, oral, cervical, and skin cancers through the program, and 8,218 breast cancer screenings were performed. Table 4-4 illustrates the MFR estimates and the actual number of individuals provided with screenings through the CPEST programs for each of the targeted cancers from FY2001 to FY2006.

It is important to note that estimated performance goals for the number of women screened for breast cancer were made in the MFR reports from FY2003 through FY2005. The data collected through the breast and cervical cancer screening database provides information about the number of screenings provided, but not the number of individuals for whom screenings are provided. Therefore, it is difficult to determine whether breast cancer screening goals were achieved.

Table 4-4. MFR Estimates and Actual Number of Individuals Screened Using CRFP Funds by Type of Cancer and Fiscal Year

Type of Cancer	FY2001	FY2002	FY2003		FY2004		FY2005		FY2006	
	Actual	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Colorectal	768	4,144	2,490	4,215	2,547	2,925	2,443	2,582	2,443	1,916
Breast	71	1,425*	500	1,618*	593	2,038*	873	1,784*	873	1,282*
Prostate	7	350	2,000	256	292	721	592	795	592	702
Oral	43	714	1,900	2,391	—	1,613	—	812	—	496
Cervical	26	658	500	712	—	771	—	544	—	962
Melanoma/skin	43	360	—	405	—	460	—	447	—	275

— = Estimate was not set in MFR reports. Note: No Estimates were made for 2001 and 2002 in MFR Reports

* = Number of screening tests performed

Source of actual screenings: DHMH Cancer Screening Database November 2006 and Breast and Cervical Cancer Database April 2006

To reduce mortality due to melanoma of the skin, rather than establishing screening benchmarks, prevention education benchmarks were created. As shown in Table 4-5, the number of people who have been educated about melanoma of the skin exceeded the MFR estimates for each year. Between FY2001 and FY2006, educational sessions about melanoma of the skin that were presented through the CPEST program were attended by a total of 78,440 members of the general public.

Table 4-5. MFR Estimates and Actual Number of People Educated About Melanoma of the Skin, by Fiscal Year

Melanoma of the Skin	FY2001	FY2002	FY2003		FY2004		FY2005		FY2006	
	Actual	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number Educated	47	7,384	11,000	10,744	7,214	17,328	7,214	19,268	—	23,669

— = Estimate was not set in MFR reports

Source of actual screenings: DHMH Cancer Education Database November 2006

Note: No Estimates were made in 2001 and 2002 MFR Reports

4.1.1.5. Goal 4: To Increase Access to Cancer Care for Uninsured Persons in Maryland

The final overarching goal for the Cancer Program is to increase access to cancer care for uninsured persons in Maryland. Table 4-6 provides estimated numbers of uninsured people who were linked to or provided with treatment through the Cancer Program from FY2001 to FY2005. The actual number of

people diagnosed and linked or provided with treatment far exceeded the goals for each year. Between FY2001 and FY2005, a total of 187 individuals have been diagnosed and linked to treatment for cancer through the Cancer Program.

Table 4-6. MFR Estimates and Actual Number of Uninsured People Linked to or Provided With Treatment through the Cancer Program, by Fiscal Year

Links to Treatment	FY2001	FY2002	FY2003		FY2004		FY2005		FY2006	
	Actual	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of People	1	18	18	45	31	68	50	55	55	NA

Source: Annual MFR Reports prepared by DHMH

4.1.2. What Evidence can be found of Program Impact on Prevention, Education, and Screening of the Targeted Cancers (I.E., Colon and Rectum, Breast, Cervical, Prostate, Oral, Skin Cancers) Under the Cancer Program?

4.1.2.1. Overview

The impact evaluation presented in this report focuses primarily on process impacts: the number of screenings provided by, and attendance to education activities conducted by the local CRF Cancer programs. Although screening activities can be linked theoretically to overall screening rates within the State, and ultimately to reductions in morbidity and mortality, a direct link between program activities and these outcomes cannot be made. Furthermore, many of the targeted cancers are being addressed by limited jurisdictions throughout the State, so statewide outcomes may not be the appropriate level of measurement even though the Program goals reflect statewide estimates.

To determine whether education activities by the local cancer programs directly affect screening behaviors, the link between those components will have to be explored in greater depth. To the degree that individuals receiving screenings through the local cancer programs enter the screening phase as a result of receiving education from these programs, a direct link between education and behavior can be made. Currently, Maryland's Cancer Screening Database contains a question regarding how individuals who come in for cancer screenings heard about the program, but this question is optional and the response options in the system do not allow a determination of whether the referring source was part of the CRFP or some other source. Therefore, the extent to which individuals enter into screening as a result of receiving education through the program cannot be ascertained.

This section reports the number of people who were provided with brief face-to-face education either individually or in groups through the program, as evidenced by DHMH's Cancer Education Database; knowledge of cancer screening tests as measured by the 2002 and 2004 Maryland Cancer Surveys (MCS); the number of screenings that have been provided through the program from FY2001 through FY2006, as reported in DHMH's Cancer Screening Database; and Maryland's cancer screening rates as reported by BRFSS. Detailed information is presented following the overview.

Overall cancer education and screening activities. The CRF Cancer Program is working to educate people about and screen against six of the seven targeted cancers. The extent to which the programs are effective in changing knowledge and behaviors cannot be fully assessed with the current data, because many of these variables have not been directly measured through the archival data sources. As detailed in this section, the Cancer Program has achieved high levels of education and screening throughout the state. The education and screening accomplishments from FY2001 through FY2006 include the following:

- One-on-one or group cancer education sessions were attended by 531,961 people in the general public

- 17,937 health care professionals have received cancer education
- 42,854 screenings for colorectal, breast, prostate, oral, cervical, and skin cancer were provided.

Colorectal Cancer. Between FY2001 and FY2006, one-on-one and group education about colorectal cancer provided by local programs saw a total of 255,860 attendees. Attendance peaked in FY2003 and declined subsequently. According to the 2002 and 2004 MCS, the number of people who have heard of FOBT tests decreased significantly over time, but those who had heard of colonoscopy or sigmoidoscopy significantly increased over time. However, awareness of the availability of no-cost colon screenings at local health departments decreased significantly from 2002 to 2004. This suggests that the diffusion of the program and lack of program branding may limit its visibility.

Since the start of the Program, a total of 17,409 colorectal cancer screenings were provided. Provision of FOBT screenings through the local programs decreased over time while colonoscopy screenings peaked in FY2003 and saw a slight increase in FY2005. According to BRFSS, screening trends among people aged 50 and older within the State somewhat mirror the screening provision trends. Although reported FOBT screenings increased from 1999 to 2002, the number of people aged 50 and older indicating having had this screening within the two years prior to being interviewed decreased significantly from 1999 to 2004. The number of people aged 50 and over indicating that they have ever been screened using sigmoidoscopy or colonoscopy increased each year from 1999 to 2004, with a significantly higher prevalence in 2004 than in 1999. Additionally, according to BRFSS, Maryland improved from a ranking of 8th highest in the nation on colorectal cancer screenings using sigmoidoscopy or colonoscopy screening prevalence in 2002 to 5th highest in 2004.

Breast and cervical cancer. Since that start of the Program, there were 54,661 attendees to one-on-one or group education about breast and cervical cancer provided by CRFP. Although no direct awareness questions regarding breast and cervical cancer screening were asked in the 2002 and 2004 MCS, the data does show that the percent of women aged 40 and over who have never had a mammogram and women aged 18 and over who have never had a Pap test because they did not know it was needed was very low in 2002 and also decreased from 2002 to 2004.

A total of 8,177 breast cancer and 3,673 cervical cancer screens were provided by the CRFP from FY2001 to FY2006. According to BRFSS, the rate of breast cancer screenings among women aged 40 and over and cervical cancer screenings among women aged 18 and older is consistently high within the State. Although, the State's national ranking for cervical cancer screenings using Pap tests improved from 5th highest in 1999 to 4th highest in 2004, its ranking for breast cancer screenings using mammogram declined from 6th highest in 2002 to 9th highest in 2004.

Prostate cancer. Since FY2001, local CRF programs provided one-on-one or group education about prostate cancer a total 57,037 attendees. Attendance to this type of education peaked in FY2005. Although there was no measure of awareness of prostate cancer screenings on the 2004 MCS, in 2002, awareness of the PSA test was at 80%.

The local CRF programs provided a total of 5,486 prostate cancer screenings between FY2001 and FY2006. Provision of these screenings peaked in FY2005. Although, according to BRFSS, there was a significant increase from 1999 to 2002 in the percent of men aged 40 and over reporting that they had received a PSA screening within the two years prior to the survey, the percent reporting the same in 2004 was significantly lower than in 2002. As such, Maryland's national ranking on prostate cancer screening using PSA slipped from 4th in 2002 to 12th in 2004.

Oral cancer. Between FY2001 and FY2006, a total of 10,988 attendees received education about oral cancer. Although there was no measure of awareness about oral cancer screening in the 2004 MCS, less than half of the respondents to the 2002 survey indicated awareness.

Local CRF Cancer programs provided a total of 6,105 oral cancer screenings between FY2001 and FY2006, with a peak in provision in FY2003. According to the Maryland Cancer Survey, the percent of adults aged 40 and over indicating that they ever had an oral cancer screening remained stable at 43% from 2002 to 2004. There was also no significant change in the prevalence of annual oral cancer screenings from 2002 (33%) to 2004 (34%).

Skin cancer. Attendance to CRFP provided skin cancer education increased annually between FY2001 and FY2006, with a total of 78,440 attendees during this time period. A total of 2,004 skin cancer screenings were performed, with a peak in screenings in 2004. The 2002 and 2004 MCS measured protective behaviors among Maryland adults, and found significant increases in the number of adults who reported using some sort of skin cancer protection and who avoid peak sun exposure. Non-significant increases were found in those who use sunscreen, wear a wide-brimmed hat for protection and wear protective clothing while outdoors on a sunny day.

Cost effectiveness of the Cancer Program. This section focuses on colorectal cancer because almost all of the local CRF programs focus on this type of cancer. Research has yet to determine the most cost-effective screening strategy for colorectal cancer. However, consensus of the medical community is that any colorectal cancer screening is cost-effective when compared with no screening for people aged 50 and older. Therefore, colorectal cancer screening should be considered by policy makers as a cost-effective, life saving activity.

4.1.2.2. Overall Cancer Education and Screening Activities

Many jurisdictions focused on providing education for three or fewer targeted cancers. However, seven of the 24 jurisdictions reported education for all types of cancer at some point during FY2001 through FY2005. All jurisdictions provided education about colorectal cancer during at least 1 year between FY2001 and FY2006 (Table 4-7). Similarly, more programs provided screenings for colorectal cancer than for any of the other targeted cancers, with all but Baltimore City (which provided one colorectal cancer screening in FY2006) doing so during at least 1 year from FY2001 to FY2006 (see Table D-1 in Appendix D).

Table 4-7. Number of Jurisdictions Providing Education and Screening by Type of Cancer [All Years]

Activity	Colorectal	Breast	Cervical	Prostate	Oral	Skin
Education	24	11	11	12	9	18
Screening	23	5	5	6	5	3

Source: DHMH Cancer Education and Cancer Screening Databases, November 2006

The Cancer Programs provided cancer education to a total of 531,961 people between FY2001 and FY2006, and the number of people educated about any cancer increased more than eightfold from FY2001 to FY2006. As shown in Table 4-8, despite funding reductions each year from FY2003 through FY2005, the number of people in the general population who received education increased across those years. In addition, a total of 13,820 health care providers and trainers/educators were educated between FY2001 and FY2006. Provision of this type of education peaked in FY2003 and again in FY2006. The Cancer Program also provided a total of 42,854 screenings for targeted cancers between FY2001 and FY2006. A peak in screening activities noted in FY2003 coincides with a peak in funding for the local public health component of the Cancer Program during that year. There was variation between and within

jurisdictions with respect to the types of education and screening they provided (see Table D-2 in Appendix D).

Table 4-8. Statewide Education and Screening Activities and Local Public Health Funding Levels by Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Education – general public	15,354	64,336	101,885	111,461	112,607	126,318	531,961
Education – health care professionals	1,106	1,896	3,996	3,228	3,045	4,666	17,937
Screening	1,029	8,302	10,050	9,376	7,821	6,276	42,854
Funding level	\$12,989,936	\$13,870,936	\$15,020,000	\$11,425,390	\$9,950,090	\$9,950,090	

Source of education and screening data: DHMH Education and Screening Databases, November 2006

Source of funding data: Annual legislative reports prepared by DHMH

4.1.2.3. Colorectal Cancer Education and Screening Activities

One-on-one or group education sessions about colorectal cancer saw 255,860 general public attendees from FY2001 to FY2006. Although attendance for education about colorectal cancer increased approximately threefold from FY2001 to FY2006, education appears to have peaked in FY2004 (Table 4-9). More people were educated about colorectal cancer in each year than any of the other targeted cancers, and more jurisdictions were involved in providing education about colorectal cancer than any of the other targeted cancers (see Table D-3 in Appendix D).

There are three types of colorectal cancer screening tests used by Cancer Programs: fecal occult blood test (FOBT), sigmoidoscopy, and colonoscopy. Between FY2001 and FY2006, Cancer Programs provided a total of 17,409 screenings for colorectal cancer. Some individuals received more than one type of screening, so the numbers presented in this section indicate the number of screenings provided—not the number of people receiving screenings. The Cancer Program provided 8,196 FOBTs from FY2001 to FY2006, resulting in 623 (approximately 7.5%) positive results during that period. The provision of 133 sigmoidoscopies resulted in 23 (approximately 17%) total outcomes showing polyps to be present. If left alone, polyps can become cancerous, so early detection and removal of polyps is an important part of colorectal cancer prevention. Additionally, a total of two (approximately 1.5%) sigmoidoscopy screenings resulted in a suspicion of cancer. A total of 9,080 colonoscopies were performed, with 1,945 (approximately 21%) detecting adenomas, or collections of growths, that can become cancerous if left untreated. In addition, 109 (approximately 1%) colonoscopy screenings came back positive for suspicion of cancer (see Tables D-4 through D-6 in Appendix D for jurisdiction-level details).

Table 4-9. Colorectal Cancer Education and Screening Activities by Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Individuals educated	12,986	52,972	59,978	49,948	39,355	40,621	255,860
Colorectal Cancer Screenings							
FOBT	674	3,085	2,128	1,246	777	286	8,196
Sigmoidoscopy	27	67	12	6	13	8	133
Colonoscopy	134	1,313	2,256	1,774	1,913	1,690	9,080

Source: DHMH Cancer Education and Screening Databases, November 2006

Note: Does not include colorectal cancer education when provided under other/multiple cancer education sessions

Although education activities may have an effect on the number of individuals receiving screenings from the Cancer Program, funding levels also may impact the ability to provide no-cost screenings. Between FY2001 and FY2006, 16,500 individuals were screened for colorectal cancer using CRFP funding. The number of individuals receiving colorectal cancer screenings through the Cancer Program increased from

FY2001 to FY2003, but decreased each subsequent year. Examining these numbers against the number of people who received education about colorectal cancer and the funding levels of the local public health component of the CRFP Cancer Program suggests that shifts in screening levels are related to shifts in education activities and funding levels. Additionally, screenings using colonoscopy decreased to a lesser degree than FOBT screenings. Early in the program, some jurisdictions used FOBT screenings to raise awareness for the programs but the programs have matured, there has been a shift away from this practice.

Education about colorectal cancer may lead to increased knowledge about the types of tests that can be done to screen for colorectal cancer. As shown in Table 4-10, according to the Maryland Cancer Survey results from 2002 and 2004, a majority of people aged 50 and over had heard of fecal occult blood tests (FOBT), sigmoidoscopy and colonoscopy as means to screen for colorectal cancer. However, awareness of FOBT decreased significantly from 2002 to 2004. Conversely, awareness of colonoscopy or sigmoidoscopy increased significantly from 2002 to 2004. Most of the respondents in both survey samples indicated awareness of the promotion of colon cancer prevention in the local media. Nonetheless, in both survey years, approximately one fifth of respondents who had never had a colorectal cancer screening test indicated that they had never thought of it or that they didn't know that they needed to have one. Awareness of the availability of no-cost colon screening through local health departments decreased significantly from 27% in 2002 to 24% in 2004. It is not clear whether that reduction in awareness of program services is related to the decrease in education reach that began in FY2004.

Table 4-10. Awareness of Colorectal Cancer Screening Tests, Media Promotion, and No-Cost Screenings, and Screening Behaviors in 2002 and 2004

Maryland Cancer Survey Measures	Survey Year: 2002	Survey Year: 2004
Heard of FOBT	81% (80% - 82%)	76% (75% - 78%)
Heard of colonoscopy or sigmoidoscopy (\geq 40 years old)	88% (87% - 89%)	91% (90% - 92%)
Aware of colon cancer prevention promoted in media	85% (83% - 86%)	86% (84% - 87%)
Never had colon cancer screening because never thought of it	22% (—)	22% (—)
Never had colon cancer screening because didn't know it was needed	16% (—)	17% (—)
Aware of no-cost colon screening at local health department (\geq 40 years old)	27% (26% - 29%)	24% (23% - 26%)
Home FOBT in the last two years	44% (42% - 46%)	36% (34% - 38%)
Sigmoidoscopy/Colonoscopy ever	58% (56% - 60%)	63% (61% - 65%)

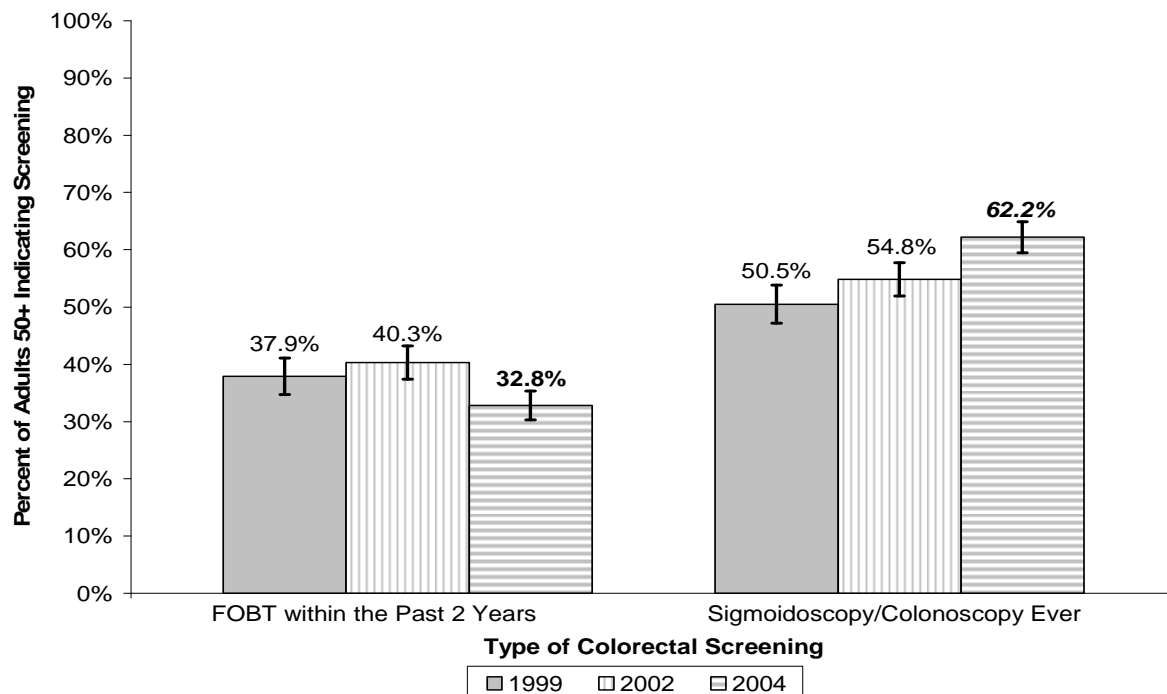
— = No confidence interval available

Source: Maryland Cancer Survey 2002, 2004

Population: Adults aged 50 and over unless specified

Consistent with the trends for provision of colorectal cancer screenings by local CRF Cancer programs, and the Maryland Cancer Survey findings regarding prevalence of colorectal cancer using FOBT, according to BRFSS data, the percent of adults aged 50 and over who indicated that they have received colorectal cancer screenings via FOBT decreased significantly from 2002 to 2004. However, consistent with the Maryland Cancer Survey findings, there was a significant increase in reported sigmoidoscopy or colonoscopy screenings both from 1999 to 2004, and from 2002 to 2004 (Figure 4-3). Although the nationwide trends for colorectal cancer screenings are similar to those of Maryland, the State has a higher prevalence of screenings for all types of screening and for all years (Table 4-11). Furthermore, according to BRFSS, Maryland moved from a ranking of 8th highest nationally for prevalence of sigmoidoscopy or colonoscopy screenings among men aged 50 and over in 2002 to 5th highest in 2004.

Figure 4-3. Maryland Colorectal Cancer Screening Trends from 1999 to 2004



Note: Items in **bold** indicate a significant change from 2002; items in **bold italics** indicate a significant change from 1999 and 2002
Source: CDC BRFSS

Table 4-11. Maryland and National (Including States, DC, and Territories) BRFSS Colorectal Cancer Screening Trends from 1999 to 2004

Screening Measures	1999	2002	2004
Maryland			
FOBT Screening in past 2 years	37.9%	40.3%	32.8%
Sigmoidoscopy/colonoscopy ever	50.5%	54.8%	62.2%
National			
FOBT Screening in past 2 years	26.2%	29.9%	26.5%
Sigmoidoscopy/colonoscopy ever	43.7%	48.1%	53.0%

Note: Confidence intervals were not reported for national data, so no significance tests were performed
Source: CDC BRFSS

The CRFP Cancer screenings are designed to be provided primarily to individuals who have low incomes and are uninsured or underinsured. Examining trends from BRFSS, reveals almost no change over time for reported sigmoidoscopy or colonoscopy screenings among uninsured individuals. BRFSS participants aged 50 and over that were uninsured were almost equally likely to report ever having had a sigmoidoscopy or colonoscopy in 2000 (30.8%), 2002 (25.9%), and 2004 (24.1%). BRFSS shows a negative trend in FOBT screenings among uninsured individuals from 2000 to 2004, with the proportion of uninsured individuals aged 50 and over reporting having had an FOBT screening declining from 2000 to 2002 (30.5%) and 2004 (12.0%). These results must be examined with caution, as the sample size of uninsured individuals aged 50 and over is extremely small for all years (n = approximately 90 per year). Therefore, these observations may not reveal stable trends.

4.1.2.4. Breast and Cervical Cancer Education and Screening Activities

There were a total of 54,661 attendees to education sessions about breast and cervical cancer between FY2001 and FY2006. Breast and cervical cancer education attendance increased consistently from

FY2001 to FY2005 (Table 4-12). Only three jurisdictions were educating any people about breast and cervical cancer in FY2001, compared with 10 jurisdictions in FY2006 (see Table D-7 in Appendix D).

Although funding levels fluctuated and decreased over time for the local public health component of the Cancer Program, education about breast and cervical cancer increased each year from FY2001 through FY2006. However, the number of breast cancer screenings provided may be more affected by the funding fluctuations, as indicated by the observed decrease in screenings provided from FY2004 to FY2006. Although there was a decrease in cervical cancer screenings from FY2004 to FY2005, there was a substantial increase in FY2006.

Local cancer programs provide both clinical breast exams (CBE) and mammography screenings for breast cancer. Individuals may receive screening using one or both methods. Therefore, the numbers presented in this section represent the number of screenings provided, not the number of individuals receiving screening. Where individuals received both CBE and mammogram screenings, the screening was counted under both CBE and mammogram. Overall, the Cancer Program provided a total of 8,177 screenings for breast cancer between FY2001 and FY2006. A total of 44 individuals were diagnosed with breast cancer as a result of these screening activities. It is unclear what proportion of individuals screened was subsequently diagnosed with breast cancer, as the database does not provide counts for individuals screened. However, if it is assumed, based on the number of screenings listed as both CBE and mammogram, that approximately 3,700 individuals received breast cancer screenings, then breast cancers were diagnosed among almost 2% of individuals who received breast cancer screenings through the Cancer Program.

A total of 3,673 women received screenings for cervical cancer through Cancer Program providers between FY2001 and FY2006. One cervical cancer was detected through these screenings. The programs that provided cervical cancer screenings were the same ones that provided breast cancer screenings (see Tables D-8 and D-9 in Appendix D).

Table 4-12. Breast and Cervical Cancer Education and Screening Activities by Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Individuals educated	398	986	4,676	14,484	16,261	17,856	54,661
Breast Cancer Screenings							
CBE	33	781	890	1,050	872	NA	3,626
Mammogram	38	644	728	988	871	NA	3,269
Pap smear	26	658	712	771	544	962	3,673

Source: DHMH Cancer Education Database, November 2006 and Breast and Cervical Cancer Database, April 2006

Note: A total of 1,282 breast cancer screenings were performed in FY2006

Note: Does not include breast and cervical cancer education when provided under other/multiple cancer education sessions

Education about breast and cervical cancer may help to maintain the high screening levels among women 40 years of age and older. Over 90% of women aged 40 and older who participated in the Maryland Cancer Survey in both 2000 and 2004 indicated that they had ever received a mammogram, and an even higher percent of women in this demographic reported ever having had a CBE. Similarly, more than 95% of respondents indicated that they had ever had a Pap smear (Table 4-13). The percent of women over 40 who had never had a mammogram because they didn't know that it was needed decreased from 2002 to 2004 as did the percent of women who indicated that they had never had a Pap smear for the same reason. However, the percent of women who indicated they did not have a mammogram or Pap smear because they did not think of it increased from 2002 to 2004. Because the Maryland Cancer Survey does not measure awareness of the program through direct questions about program activities, it cannot be determined whether the education component of the program is directly affecting knowledge, awareness, and behaviors.

Table 4-13. Breast and Cervical Cancer Screening Knowledge and Behaviors 2002 and 2004

Measures	Survey Year: 2002	Survey Year: 2004
Ever had a mammogram*	93% (92% - 94%)	93% (91% - 94%)
Ever had a CBE*	94% (94% - 97%)	96% (95% - 96%)
Ever had a Pap smear**	97% (96% - 98%)	98% (98% - 99%)
Never had a mammogram because never thought of it*	15% (—)	16% (—)
Never had a mammogram because didn't know it was needed*	14% (—)	8% (—)
Never had a Pap smear because never thought of it**	19% (—)	24% (—)
Never had a Pap smear because didn't know it was needed**	12% (—)	10% (—)

— = No confidence interval available

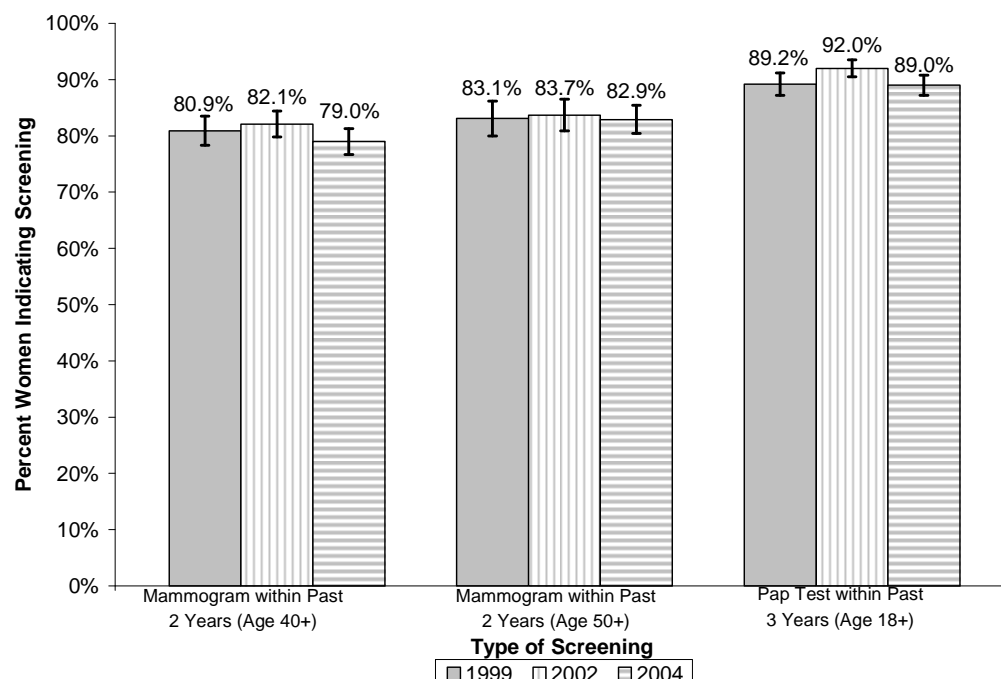
Source: Maryland Cancer Survey 2002, 2004

*Population: Women aged 40 and older

**Population: Women aged 18 and older

CDC's BRFSS measures breast cancer screening behaviors within the past two years among women aged 40 and over, and women aged 50 and over, as well as measuring whether women aged 18 and older have had a Pap smear within the past three years. These data show high prevalence of screening behaviors among women in each category. Although there are no increases in breast and cervical cancer screening behavior observed from 1999 to 2004, this may be due to a ceiling effect (see Figure 4-4). According to BRFSS data, the screening trends in Maryland are similar to those observed nationally. Importantly, the screening rates observed in Maryland are higher than those observed nationally on all measures of breast and cervical cancer screening, and in all years where comparisons are available. Maryland's cervical cancer screening rates resulted in a State ranking of 5th highest in 1999 and 4th highest in 2004. However, according to BRFSS, Maryland moved from a ranking of 6th highest nationally for prevalence of mammogram screenings within the past two years among women aged 40 and over in 2002 to 9th highest in 2004.

Figure 4-4. Maryland Breast and Cervical Cancer Screening Trends from 1999 to 2004



Source: CDC BRFSS

Table 4-14. Maryland and National (Including States, DC, and Territories) BRFSS Breast and Cervical Cancer Screening Trends from 1999 to 2004

Screening Measures	1999	2002	2004
Maryland			
Mammogram within past 2 years (age 40+)	80.9%	82.1%	79.0%
Mammogram within past 2 years (age 50+)	83.1%	83.7%	82.9%
Pap test within past 3 years (age 18+)	89.2%	92.0%	89.0%
National			
Mammogram within past 2 years (age 40+)	72.8%	75.9%	74.7%
Mammogram within past 2 years (age 50+)	75.9%	79.4%	78.0%
Pap test within past 3 years (age 18+)	85.5%	86.8%	NA

Note: Confidence intervals were not reported for national data, so no significance tests were performed
Source: CDC BRFSS

Examining BRFSS breast and cervical cancer screening trends among women who are uninsured reveals an overall upward trend for mammogram screening among uninsured Maryland women aged 50 and older. The proportion of who indicated they had a mammogram within the past two years was greater in 2002 (71.2%) and 2004 (67.2%) than in 1999 (61.4%). This spike was not noted among those with some kind of health insurance, for whom the trend remained flat. However, this finding is based on a very small number of uninsured respondents (50 to 62 in each year), so must be interpreted with caution. The pattern of Pap test screenings among Maryland uninsured women aged 18 and older was similar to the pattern observed among Maryland women aged 18 and older, in general. The percent of uninsured women reporting that they have had a Pap test within the past three years was highest in 2002 (85.9%), and was lower in 2004 (70.9%) than it was in 1999 (77.4%). The trend among women who have some kind of insurance was flat across all years (90.4% in 1999; 92.8% in 2002; 90.8% in 2004). These figures are based on a small uninsured sample size ranging from 182 to 210 respondents, so should be viewed accordingly.

4.1.2.5. Prostate Cancer Education and Screening Activities

One-on-one or group education sessions about prostate cancer were attended by a total of 57,037 people between FY2001 and FY2006. The number of people educated about prostate cancer increased by a factor of 280 from FY2001 to FY2005, and decreased almost by half from FY2005 to FY2006 (Table 4-15). Whereas just two jurisdictions were providing education about prostate cancer in FY2001, there were nine jurisdictions providing the same in FY2006 (see Table D-10 in Appendix D). The bulk of the increase in overall education activities is due to the provision of education in Baltimore City, which provided the majority of prostate cancer education between FY2002 and FY2006.

There are two tests used to screen for prostate cancer — digital rectal exam (DRE) and prostate-specific antigen test (PSA). Note that individuals may receive one or both types of screenings. A total of 5,486 prostate cancer screenings for 2,831 individuals were provided between FY2001 and FY2006. Since FY2004, the number of local cancer programs providing prostate cancer screenings has tripled (see Table D-11 in Appendix D). A total of 33 prostate cancers have been diagnosed through these screening efforts. Although funding levels for the local public health component of the CRFP fluctuated from FY2001 to FY2006, decreases in prostate cancer education and screening activities were not observed until FY2006 (Table 4-15).

Table 4-15. Prostate Cancer Education and Screening Activities by Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Individuals educated	66	290	14,611	14,555	17,900	9,615	57,037
Individuals screened	7	350	256	721	795	702	2,831
Prostate Cancer Screenings							
DRE	5	326	240	702	752	568	2,593
PSA	6	354	269	752	805	707	2,893

Source: DHMH Cancer Education and Screening Databases, November 2006

Note: Does not include prostate cancer education when provided under other/multiple cancer education sessions

Provision of education about prostate cancer may be related to the high percent of men aged 50 and older who receive prostate cancer screenings. According to the 2002 Maryland Cancer Survey results, 80% of men aged 50 and over had heard of the PSA test for prostate cancer screening (Table 4-16).

Approximately three-quarters of men over aged 50 reported ever having had a PSA screening in both 2002 and 2004. Although the number of men who indicated that they had never had a PSA test because they never thought of it increased from 2002 (20%) to 2004 (27%), the number of men who indicated that they had never done so because they didn't know that they needed it decreased from 16% in 2002 to 11% in 2004. The number of men who reported ever receiving a DRE test decreased significantly from 2002 (89%) to 2004 (86%). Information about knowledge of the DRE test for prostate cancer screening was not reported in the Maryland Cancer Survey, so it is unclear why this decrease occurred.

Table 4-16. Prostate Cancer Screening Knowledge and Behaviors 2002 and 2004

Measures	Survey Year: 2002	Survey Year: 2004
Ever heard of a test called PSA to screen for prostate cancer	80% (78% - 82%)	Not asked
Ever had a PSA test	73% (70% - 75%)	77% (74% - 80%)
Never had a PSA test because never thought of it	20% (—)	27% (—)
Never had a PSA test because I didn't know I needed it	16% (—)	11% (—)
Ever had a DRE test	89% (—)	86% (—)

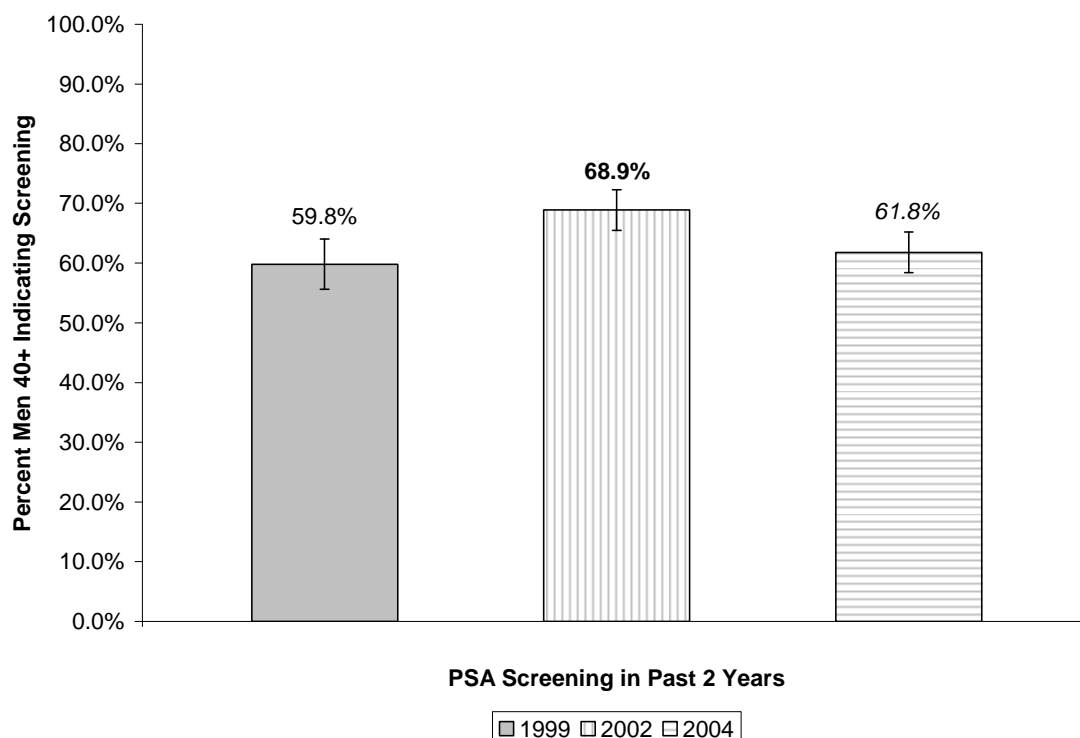
— = No confidence interval available

Source: Maryland Cancer Survey 2002, 2004

Population: Men aged 50 and older

CDC's BRFSS measures prostate cancer screening behaviors among men aged 40 and over, asking if they have had a PSA test within the past two years. According to BRFSS data, there was a significant increase in prostate cancer screening behaviors from 1999 to 2002. However, in 2004, the prevalence of prostate cancer screening among men aged 40 and over decreased significantly, almost back to the level observed in 1999 (Figure 4-5). According to BRFSS data, the screening trends in Maryland are similar to those observed nationally. Although data for a national comparison for 1999 are not available through CDC's BRFSS, Examining the available BRFSS data for 2002 and 2004 reveals that Maryland's screening rates were higher than the national medians for both years. The national data reveal that unlike the screening behaviors in Maryland, national screening behaviors were relatively flat from 2002 to 2004 (Table 4-17). However, the decrease in PSA screening behaviors among Maryland men aged 40 and over resulted in a move from a national ranking of 4th highest in 2002 to a 12th highest in 2004 (not including territories).

Figure 4-5. Maryland Prostate Cancer Screening Trends from 1999 to 2004



Note: Items in **bold** indicate a significant change from 1999; items in *italics* indicate a significant change from 2002
Source: CDC BRFSS

Table 4-17. Maryland and National (Including States, DC, and Territories) Prostate Cancer Screening Behavior in 2002 and 2004

Screening Measures	2002	2004
PSA within the past 2 years (Maryland)	68.9%	61.8%
PSA within the past 2 years (National)	53.9%	52.1%

Note: Confidence intervals were not reported for national data, so no significance tests were performed
Source: CDC BRFSS
Population: Men aged 40 and older

BRFSS showed a spike in the proportion of uninsured men aged 40 and over who reported having had a PSA test within the past two years from 1999 (19.1%) to 2002 (45.1%) and a return to pre-Program rates in 2004 (18.5%). Because this data is based on a relatively small number of respondents, ranging from 68 to 71, these results should be interpreted with caution. However, the trend among uninsured men aged 40 and over appears to be similar to the trend observed in Maryland overall, as well as to the trend among individuals who do have some sort of medical insurance.

4.1.2.6. Oral Cancer Education and Screening Activities

A total of 10,988 individuals received education about oral cancer between FY2001 and FY2006 (Table 4-18). Only one jurisdiction provided education about oral cancer in FY2001. This increased to seven jurisdictions in FY2006, resulting in an increase from 65 people educated in FY2001 to more than 3,800 people educated in FY2006 (see Table D-12 in Appendix D).

Changes in funding levels do not appear to have had a significant effect on education about oral cancer. However, as illustrated in Table 4-18, the number of individuals screened for oral cancer through Cancer

Programs peaked when funding was at its highest in FY2003, and declined with decreasing funding during through FY2006.

In FY2001, there were two jurisdictions providing oral cancer screening services. Between FY 2001 and FY2006, five jurisdictions have provided screenings at one point or another (see Table D-13 in Appendix D). Programs providing screening for oral cancer used two screening tools: oral exam and brush biopsy. Brush biopsies are used as a diagnostic test and are typically performed only after suspicious findings are present on the oral exam. A total of 6,105 oral exams were provided to 6,069 individuals by CRFP funded local cancer programs from FY2001 to FY2006. As a result of the oral exams, 186 brush biopsies were performed, and seven cancers were diagnosed.

Table 4-18. Oral Cancer Education and Screening Activities by Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Individuals educated	65	753	1,147	2,448	2,681	3,894	10,988
Individuals Screened	43	714	2,391	1,613	812	496	6,069
Oral cancer screenings							
Oral screening	43	714	2,407	1,622	823	496	6,105
Brush biopsy	0	9	96	46	30	5	186

Source: DHMH Cancer Education and Screening Databases, November 2006

Note: Does not include oral cancer education when provided under other/multiple cancer education sessions

Education about oral cancer may lead to an increase in the number of individuals who visit the dentist, and subsequently, a greater number of people being screened for oral cancer. According to the 2002 Maryland Cancer Survey, less than one-half of respondents had heard of oral cancer screening. No oral cancer screening test awareness question was asked in the 2004 survey, so it is unclear how the increase in provision of education might have affected awareness among the general population. During both survey years, approximately three-quarters of people (76%) reported having visited the dentist within the past year. Less than one-half (43%) of people reported having ever had an oral cancer screening in both 2002 and 2004, and approximately one-third (33% in 2002 and 24% in 2004) reporting that they had an oral cancer screening in the past year (Table 4-19). CDC's BRFSS does not directly measure oral cancer screening behaviors, so no nationally comparative data is available to examine Maryland oral cancer screening rates in comparison to national rates.

Table 4-19. Oral Cancer Screening Knowledge and Behaviors 2002 and 2004

Measures	Survey Year: 2002	Survey Year: 2004
Have heard of an oral cancer screening test	45% (43% - 47%)	Not asked
Had a dental visit in the past year	76% (75% - 77%)	76% (74% - 77%)
Ever had an oral cancer screening	43% (41% - 44%)	43% (42% - 45%)
Had an oral cancer exam in the past year	33% (32% - 35%)	34% (32% - 35%)

Source: Maryland Cancer Survey

Population: Adults aged 40 and older

4.1.2.7. Skin Cancer Education and Screening Activities

The CRFP Cancer Program provided skin cancer education with 78,440 in attendance from FY2001 to FY2006 (Table 4-21). Skin cancer education had the greatest increases among all types of cancer education, both in number of jurisdictions providing education and in the number of people receiving education from FY2001 to FY2006. Whereas only one jurisdiction provided skin cancer education during FY2001, 15 jurisdictions provided skin cancer education during FY2006 (see Table D-14 in Appendix D).

Three local cancer programs provided a total of 2,004 skin cancer screenings in their jurisdictions. As a result of the screenings provided, 20 melanoma or other skin cancers were diagnosed (see Table D-15 in

Appendix D for jurisdiction-level detail). Skin cancer education activities do not appear to have been affected by fluctuations in funding levels for the local public health component of the CRFP. The number of attendees at educational sessions about skin cancer has increased each year from FY2001 through FY2006. Screening did not appear to be affected by funding fluctuations from FY2001 through FY2005, as the screening levels increased from FY2001 to FY2003, then the levels of screening were maintained until FY2005. However, screenings decreased by almost on half from FY2005 to FY2006.

Table 4-20. Skin Cancer Education and Screening Activities by Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Individuals educated	47	7,384	10,744	17,328	19,268	23,669	78,440
Individuals Screened	43	360	408	465	451	277	2,004

Source: DHMH Cancer Education and Screening Databases, November 2006

Note: Does not include skin cancer education when provided under other/multiple cancer education sessions

Provision of skin cancer education may lead to an increase in behaviors to protect against skin cancer. According to the MCS, the number of people who always or nearly always perform some protective behavior such as avoiding the sun, wearing sunscreen, or wearing protective clothing increased significantly from 2002 (67%) to 2004 (71%). Additionally, as shown in Table 4-22, there was a significant increase in the number of people who reported that they avoid sun exposure during peak parts of the day from 2002 (37%) to 2004 (42%). There was also a non-significant increase from 2002 (25%) to 2004 (28%) in the number of people who reported that they wear protective clothing when they are outdoors for an hour or longer during sunny days. CDC's BRFSS does not contain variables to measure skin cancer protective and risk behaviors.

Table 4-21. Skin Cancer Protective Behaviors 2002 and 2004

Measures	Survey Year: 2002	Survey Year: 2004
Always or nearly always avoid sun exposure between 10 am and 4 pm	37% (35% - 39%)	42% (40% - 44%)
Always or nearly always use sunscreen with a SPF rating of 15 or higher when outdoors for an hour or more on a sunny day	33% (31% - 34%)	34% (32% - 35%)
Always or nearly always wear a wide-brimmed hat or other hat that shades face, ears, and neck when outdoors for an hour or more on a sunny day	24% (23% - 25%)	25% (24% - 27%)
Always or nearly always wear protective clothing when outdoors for an hour or more on a sunny day	25% (24% - 27%)	28% (27% - 30%)
Always or nearly always use some sort of skin cancer protection	67% (65% - 68%)	71% (69% - 72%)

Source: Maryland Cancer Survey

Population: Adults aged 40 and older

4.1.2.8. Cost Effectiveness of the Cancer Program

The in-depth analysis of the economic impact of cancer screenings focuses on colorectal cancer for two reasons. First, these screenings are conducted by more jurisdictions and provided to more individuals than any other type of screen in the CRF Cancer Program. Second, there is no other source of free colorectal screenings in Maryland (except Baltimore City, where colorectal screenings are funded by the CDC, rather than the CRFP). Currently the Cancer Program provides colorectal screenings to uninsured and under-insured residents of 22 jurisdictions.

There are three different types of colorectal cancer screening tests available: FOBT, sigmoidoscopy and colonoscopy. The approach used for evaluating the economic impact of screenings is based on the fact that screenings are diagnostic interventions; more than one diagnostic intervention is available for colorectal cancer. Thus, the effectiveness of the various screening options available is compared. The

commonly accepted base used for comparison is “1 life year saved” and the costs of the various screening interventions to achieve this standard result are compared⁴.

The costs of the screening intervention consist of the initial screening plus the follow-up screenings and treatments, based on assumed probabilities, over a number of years. The cost per life year saved is calculated by focusing on the days or years of life gained when following a specific strategy compared with that of no screening, and is given by the following equation (Board on Science, Technology, and Economic Policy (STEP) National Cancer Policy Board (NCPB), 2005).

$$CE = \frac{(\text{Lifetime cost with strategy} - \text{lifetime cost with no screening})}{(\text{Years lived with strategy} - \text{Years lived with no screening})}$$

i.e., CE measures the cost incurred to gain one additional year of life.

The cost-effectiveness analysis makes assumptions about screenings in order to mimic the irregularity of colorectal cancer and the variation in possible screening strategies. The variation in these assumptions influences the life years saved as well as the cost per life year saved. The assumptions include the biological behavior of colorectal cancer; the cost, sensitivity and specificity of the screening; the screening strategy which includes the schedule of screenings, and the age at initial screening; necessary follow-up treatment; and the individual's compliance to a specific screening strategy.

Due to the numerous assumptions that must be made to calculate CE, it is not possible to provide an exact figure and therefore all cost analysis provides is a range of cost-effectiveness based on the assumptions made by the researchers.

Cost Effectiveness. The economic impact analysis for colorectal cancer screening tests summarizes all the major national studies related to colorectal cancer screening, with a focus on the three screening tests that Maryland's cancer program currently performs: colonoscopies, sigmoidoscopies, and FOBT.

Most studies conclude that any of the commonly used screenings is cost effective. Table 4-23 provides a comparison of the cost effectiveness of FOBT, sigmoidoscopy, and colonoscopy. The results come from different studies, which follow different assumptions and screening strategies. With the exception of Sonneberg et al. (2000),⁵ the studies in Table 4-23 estimate that the various screening strategies would cost less than \$13,000 on average to prolong a patient's life by one year.

Table 4-22. Cost effectiveness of colorectal screening tests compared with no screening.*

Type of screening test		Loeve et al. (2000)	Vijan et al. (2001)	Frazier et al. (2000)	Sonneberg (2000)
FOBT (fecal occult blood test)	Strategy**			Once a year	Once a year
	Life Years Saved***			4,200	1,896
	\$ per life-year saved			\$12,667	\$81,679
Flexible Sigmoidoscopy	Strategy**	Every 5 years between age 50 and 75		One test at age 55	Every 5 years
	Life Years Saved***	2,800		1,510	3,636

⁴ By contrast, the economic analysis for tobacco is focused on the costs incurred as a result of smoking-related disease, which means that there are no distinct interventions whose costs have to be compared.

⁵ Sonnenberg et.al. (2000) produced cost-effectiveness ratios considerably higher than other studies for FOBT and signoidoscopy, partly because the authors made more conservative assumptions of the reduction in mortality with screening (Pignone, et al., 2002).

Type of screening test		Loeve et al. (2000)	Vijan et al. (2001)	Frazier et al. (2000)	Sonneberg (2000)
	\$ per life-year saved			\$1,200	\$74,032
Colonoscopy-	Strategy**		Once at age 60	Once at age 55	Every 10 years
	Life Years Saved***		3,450	2,790	7,952
	\$ per life-year gained		\$130	\$9,641	\$28,143

Source: Loeve et al. (2000), Vijan et al. (2001), Frazier et al. (2000), Sonneberg (2000)

* If more than one schedule was evaluated for each type of test, the most cost-effective schedule is included in the table. Some screening tests were evaluated in the studies but cost-effectiveness was not reported. Cost-effectiveness is not measured on the same year dollars.

**Schedule of test in the case of negative results. Assumption of further screening and treatment following positive tests vary by study.

*** Life-years saved per 100,000 persons 50 years of age.

In a more recent study, Maciosek et al. (2006) updated the work of Vijan et al (2001) by including the time that patients spend on being screened as part of the cost. Table 4-24 shows the adjusted cost-effectiveness ratios for FOBT, sigmoidoscopy, and colonoscopy. Even after adding the time cost of receiving screening, costs for the three strategies are in the range \$8,840-18,869 per life-year saved.

Table 4-23. Cost-Effectiveness Ratios with a Broadened Definition of Cost

	FOBT (Annually)	Sigmoidoscopy (Every 5 years)	Colonoscopy (Every 10 years)
Discounted net costs adjusted to year 2000 dollars	\$183	\$463	\$323
Inflation-adjusted average cost effectiveness (per life-year saved)	\$8,355	\$15,801	\$7,561
Discounted net costs with addition of time costs	\$292	\$533	\$378
Adjusted cost effectiveness (per life-year saved)	\$13,334	\$18,869	\$8,840

Source: Maciosek et al. (2006)

Conclusion. Research has yet to determine the most cost-effective screening strategy for colorectal cancer. This is partly due to the lack of knowledge and consensus on the biological behavior of colorectal cancer at different stages. Even when different simulation models were conducted with standardized assumptions on cost and test characteristics, they did not generate similar cost-effective ratios (NCPB, 2005).

Notwithstanding the variance in the estimates of cost-effectiveness for any particular screening, the consensus of medical community is that any colorectal cancer screening is cost-effective when compared with no screening for population 50 years and older. Thus, colorectal cancer screening should be considered by policy makers as cost-effective, life-saving activity. Since there is no clear indication as to which screening is more cost-effective, the choice of the screening should be made by medical professionals and the patients.

4.1.2.9. Local Cancer Program Perspectives

In-depth interviews with Cancer coordinators gave an opportunity for them to discuss program highlights. Most of the Cancer program coordinators indicated that the provision of services to the community is one highlight of their local CRF Cancer programs. Specifically, they discussed that their programs provide education to Marylanders about cancer prevention and the importance early detection and screening, as well as screening services for low income, uninsured and underinsured individuals. Additionally, with the cooperation of community providers, they have helped raise awareness of, and participation in, the Cancer program. Many coordinators stressed the importance working with their coalitions and the community to develop strong action plans that reflect community needs. In striving to reach minority populations, many jurisdictions have established relationships and communication channels with various community partners that have increased minority participation in their coalition and program services.

For some Cancer program coordinators, a program highlight is that pre-cancerous polyps are being identified and removed through colonoscopies funded under the CRF program, eliminating the possibility that they will develop into cancer. Some coordinators noted that according to the available data, cancer rates are decreasing and, with the CRF program's efforts at education and screening services, they anticipate that the rates will continue decline. Finally, a few coordinators suggested that lives are being saved through the screening, diagnosis, and treatment of cancer provided by the local CRF Cancer programs.

Local health officers were asked for their opinions about the highlights of the Cancer program, and how they thought the Cancer program impacts their communities. Most indicated that their local programs have increased cancer screenings among individuals who would not be screened under other circumstances. Many also indicated that their programs have raised awareness about the importance of early screenings, cancer risks, and the availability of free screenings in their jurisdictions. Some local health officers indicated that their programs have succeeded in building strong coalitions that plan programs targeted for the populations in their communities and provide important outreach to the communities. A few discussed how their programs have helped to build strong relationships between the health department and medical providers in their communities, which enables the program to achieve its reach. Equally important, programs have built relationships with the community that engender trust and build understanding about the needs of their communities.

4.1.2.10. State CRFP Cancer Staff Perspective

State level CRFP Cancer staff were asked during in-depth interviews to describe highlights of the Cancer program. Most of the Cancer staff said that the increase in colorectal cancer screening was a major highlight of the program. Providing health services directly to the public, especially low-income populations was emphasized as a highlight. In the same vein, being able to make concrete changes, such as increased education, diagnosis and treatment and reduction of cancer mortality was mentioned. These activities have increased the importance and visibility of cancer control in the State, and have been facilitated by being able to bring people together, including two cancer centers, health departments, communities, and coalitions for a common cause. It was indicated that the cancer program has created jobs at local health departments; encouraged sharing of methods, tools, and data; and that the Program serves as a national model.

4.1.3. To what Extent were Local Cancer CRFP Plans Reflective of Community Needs and Priorities Identified by Data?

4.1.3.1 Overview

The fact that most of the local Cancer programs provide screenings for colorectal cancer indicates that at least to some degree, they are taking the recommendations of the US Preventive Services Task Force and the Task Force on Community Preventive Services, which indicated that colorectal cancer screening for people aged 50 and over is a strongly recommended strategy. Although breast and cervical cancer screening is also highly recommended, jurisdictions receive federal funds through the CDC to provide such screenings, so the need for these screenings via CRFP may not be as great. According to the surveys conducted with local Cancer program coordinators, it appears that program coordinators are familiar with the screening guidelines, and local and State level data to inform their program planning, and that they consider this information during planning. However, as is discussed in Section 4.1.4, local Cancer program coordinators feel limited in the flexibility that they have for planning and implementing their programs.

4.1.3.2. Program Guidelines and Recommendations

Cancer programs appear to have taken into account information provided through the surveillance and evaluation activities of the program when planning their local program education, screening, prevention and treatment activities. Specifically, the Maryland Comprehensive Cancer Control Plan provides information about evidence-based effective interventions. Recommendations regarding the effectiveness of interventions are provided, based upon findings from the U.S. Preventive Services Task Force and the Task Force on Community Preventive Services. According to these sources, the following interventions are strongly recommended or recommended:

- Colorectal cancer screening for men and women 50 years of age and older
- Cervical cancer screening for women who have been sexually active and have a cervix
- Breast cancer screening mammography every one to two years for women aged 40 and older

There was insufficient evidence for intervention effectiveness to recommend screening for prostate cancer, oral cancer, and skin cancer. Screening for lung cancer was not recommended as an effective intervention.

Some of these recommendations appear to have been taken into account by the local Cancer programs, as evidenced by the fact that almost all jurisdictions engage in screening for colorectal cancer. Although cervical cancer screening is highly recommended and breast cancer screening is recommended, only five jurisdictions provide cervical and breast cancer screenings. It is not clear why comparatively few jurisdictions focus on these two types of recommended interventions, but one factor may be that there are federally funded breast and cervical cancer programs in each jurisdiction. Although there is insufficient evidence to indicate effectiveness of prostate cancer screening as an intervention, six jurisdictions provide this type of screening. Similarly, five jurisdictions offer oral cancer screenings, and three jurisdictions offer skin cancer screenings.

4.1.3.3. Familiarity and Use of Guidelines and Data

The surveys conducted with Cancer program coordinators asked about familiarity with and use of available data for program planning. Cancer program coordinators indicated high levels of familiarity with local and level data on cancer incidence ($M = 4.38$) and mortality ($M = 4.25$), as well as State level data on cancer incidence ($M = 4.38$) and mortality ($M = 4.38$). In fact, between 92.0% and 96.0% of respondents indicated that they are familiar with each of these sources of information. Similarly, Cancer program coordinators are highly familiar with evidence-based screening recommendations ($M = 4.58$) and with activities of other cancer prevention, education, screening and/or treatment programs in their jurisdictions ($M = 4.33$).

While familiarity with sources of information is a key component to program planning, use of the information is essential to planning programs that are targeted to the communities for which they are intended. Cancer program coordinators indicated that available guidelines, data, and coalition member input are important sources of information for the planning of their local programs. While all of the sources of information probed were rated as being very important for program planning, respondents assigned the highest importance ratings to evidence-based screening recommendations ($M = 4.71$), which all respondents (100.0%) rated as important or very important for program planning. Coordinators also take into account information from local level data on cancer incidence ($M = 4.54$) and mortality ($M = 4.54$), input from coalition members ($M = 4.55$), State level data on cancer incidence ($M = 4.46$) and mortality ($M = 4.42$), and the activities of other local cancer programs when planning the programs for their jurisdictions.

Given the importance assigned to local and State level data in program planning, the availability of this data is an important factor for local programs. As such, coordinators were asked to indicate their satisfaction with the availability and usefulness of local and State level data. Most Cancer program coordinators indicated satisfaction with the availability of both local level data (75.0%; $M = 3.83$) and State level data (79.3%; $M = 4.13$). Importantly, most respondents (82.6%) also indicated that they find the data provided by DHMH to be useful in their program planning ($M = 4.09$).

4.1.4. How well did the Surveillance and Evaluation Activities Work in the Cancer Programs?

4.1.4.1. Overview

In addition to establishing a Surveillance Advisory Committee to provide guidance to the Unit of the Center for Cancer Surveillance and Control, the Surveillance and Evaluation Unit was quite active and established valuable data collection and data monitoring systems for the program. The tracking system that was created enables examination of education and screening activities, as well as screening outcomes. By collecting information about where the education was presented (for example, in a doctor's office or at an event), how the education was presented (for example, a presentation to a small group or answering an individual's questions posed at an event), and why the education was presented (for example, during a visit to the doctor, a presentation to someone who was referred for education) will enable programs to identify the quality of the education activities as well as the reach of those activities. These data could help local programs to plan outreach activities.

The Cancer Program has conducted annual cancer studies as required by the statutes. They have also conducted annual surveys that examine trends in screening levels.

4.1.4.2. Surveillance and Evaluation Accomplishments

When the programs began functioning in FY2001, there were no systems for tracking program activities in place. Thus, the Cancer Program was charged with creating new systems for this purpose. Legislative statutes required programs to implement statewide surveillance activities to examine cancer-related outcomes within the State and the jurisdictions, and to conduct annual program evaluations. To perform these requirements, the Cancer Program created The Surveillance and Evaluation Unit of the Center for Cancer Surveillance and Control. The purpose of the Surveillance and Evaluation Unit is to:

1. Collect and analyze data relating to targeted cancers and to the Cancer Program
2. Measure and evaluate the Cancer Program
3. Conduct a baseline cancer study
4. Conduct an annual cancer study.

To collect and analyze data and to monitor the activities of the Cancer Program, the Surveillance and Evaluation Unit implemented two computerized tracking systems: one to collect information about screenings, and one to collect information about education activities. This information can be examined at the jurisdiction and State level. The data collected through these systems provide detailed information regarding education and screening activities. Screening data provide information on type of cancer, characteristic of the participants, and outcomes. The education data can be enumerated by type of cancer, characteristics of the participants, and target audience (e.g., health care providers or the general public).

Information resulting from data collected through the cancer screening and education databases is compiled and made public on the State Website. Reports indicating the number of people educated and screened for skin, colorectal, oral, and prostate cancer are available.

The purpose of the baseline cancer study was to provide information on cancer incidence, mortality, stage of disease at diagnosis, statewide screening levels, public health evidence, and public health interventions for the seven targeted cancers. The baseline cancer study was completed in 2000, and follow-up studies have been conducted annually. The reports are made public on the State website.

The Surveillance and Evaluation Unit has also implemented the Maryland Cancer Survey, a population-based survey examining cancer risk and screening behaviors among people age 40 and older. This survey was fielded in 2002 and in 2004, and is planned for 2006. During the years that the Maryland Cancer Survey was not fielded, alternate surveys were implemented. In 2003, a physician survey was fielded to uncover information related to the Maryland Cancer Survey finding that one common reason for not receiving cancer screenings cited by respondents was that physicians or health care providers did not recommend screenings. In 2005, a trailer park survey and a Latino cancer survey were fielded to allow an examination of individuals most likely to fall in the target population of the Cancer Programs (low SES, uninsured, or underinsured).

Finally, the Surveillance and Evaluation Unit uses databases including BRFSS and the Maryland Health Care Commission and Maryland Health Services Cost Review Commission for surveillance purposes. A Surveillance Advisory Committee was established to provide guidance and expertise to the Unit.

As mentioned earlier, Cancer program coordinators indicated that they are satisfied with the local and State level data that is available to them for planning their programs. Importantly, program coordinators indicated that the data provided by DHMH is useful for them in planning and implementing their programs.

4.1.5. What Factors Helped or Hindered the Implementation of the Cancer Programs?

4.1.5.1. Overview

Local program coordinators provided input via surveys and in-depth interviews regarding factors that have helped or hindered the implementation of their local Cancer programs. Local CRFP Cancer coalition members also provided input regarding facilitators and barriers via surveys. Local Health Officers and State level Cancer Program staff were also asked to provide information about program facilitators and barriers during the in-depth interviews.

Through the surveys and in-depth interviews local Cancer program coordinators indicated that the Cancer programs have been helped most by having the supportive relationships with care providers, having knowledgeable and capable staff, and having funding to implement their programs, and having good communication with and support from DHMH. State Cancer Program staff also feel that their communication and guidance has facilitated the local programs.

During interviews, local program coordinators and local health officers indicated that funding issues cause the biggest barriers for their programs. Specifically, programs face a lack of funding to support the screening demands in their communities, they lack funding for treating cancers that are detected through their screening activities, and fluctuations in funding create problems with program planning and continuity. Lack of funding for staff was also mentioned by some State Cancer Program staff as an issue for local program implementation. According to the local program coordinators, implementation has also been hindered by the time and effort required by the Cancer Education Database, difficulties in

recruiting and retaining physicians, the lengthy procurement process, and limited flexibility in local decision making.

4.1.5.2. Facilitators and Barriers

General Facilitators. On the Cancer coordinators surveys, Cancer coordinators were asked to list the top three facilitators to implementing their programs. Most respondents were able to provide three program facilitators. The most common facilitator mentioned was the relationships with and support programs receive from care providers. During the in-depth interviews, this facilitator was mentioned by some coordinators, who indicated that the cooperation they received from the healthcare community and the local physicians in establishing the program so that it would address the needs of everyone in the system. As indicated in Table 4-25, having capable and knowledgeable staff was also an important facilitator identified on the surveys, and was also mentioned by some coordinators during the in-depth interviews. Some stated that they would not be able to provide the level of outreach that they provide were it not for the dedication and hard work of their local staff.

On the surveys, funding was an important facilitator listed by some Cancer program coordinators. This was echoed in the interviews, in which some coordinators mentioned the importance of the funding from the CRFP, the opportunity it provides for them to provide screening services to the community, and the capability to leverage these funds to extend the scope of services that are available. Community support, and communication with and support from DHMH were also listed on the surveys as facilitators by some coordinators. During the in-depth interviews, the guidance and communication from the DHMH was one of the most commonly stated facilitators for implementing the Cancer program. Cancer program coordinators indicated that the DHMH staff work hard to answer questions, make programmatic suggestions for improvement, review and comment on program materials, and generally respond to the needs of the local programs.

A few respondents indicated that the support they receive from their local coalitions and having good leadership, being able to conduct community outreach events, having a good relationship with their MOTA program, and having support from their Local Health Departments are important facilitators for implementation of local Cancer programs. During the in-depth interviews, a few coordinators mentioned that the support they receive from their Health Officers is an important facilitator for their programs, particularly in allowing them to carry out the program in a way that they see as appropriate for their target populations. Other facilitators mentioned during the surveys include support from faith-based organizations and physicians, availability of general resources, increased program marketing, increased public awareness of screening needs, being able to share information and resources across counties, and having a good understanding of disparities.

Table 4-24. Facilitators for Implementing Local Cancer Programs

Facilitator	Most Important	Second Most Important	Third Most Important	Total Mentions
Providers support/relationships	6	4	3	13
Capability and knowledge of staff	6	2	3	11
Funding	4	2	0	6
Community support	2	2	1	5
Communication and support from DHMH	1	0	3	4
Coalition support	0	3	0	3
Good leadership	1	1	0	2
Community outreach events	0	1	1	2
Relationship with MOTA vendor	0	2	0	2

Facilitator	Most Important	Second Most Important	Third Most Important	Total Mentions
Local Health Department support	0	0	2	2
Increased public awareness of screening needs	1	0	0	1
Faith-based community support	0	1	0	1
Sharing resources across counties	0	0	1	1
Understanding of disparities	0	0	1	1
Total	21	18	15	54

Source: Cancer Program Coordinator Survey

During in-depth interviews with local health officers identified several facilitators for their local Cancer programs. Of the five most commonly mentioned facilitators for the program, two were internal and three were external. Specifically, the internal facilitators included having dedicated and knowledgeable local program staff to plan and implement the programs, and having a strong coalition that guides and promotes the program. The external facilitators included the availability of support and assistance from the State level Cancer program staff, having good relationships with the health care providers in the community, and having the funding to provide screenings to individuals who would not receive them otherwise. Moreover, local health officers pointed to the strong framework provided by screening guidelines and through having existing programs upon which to build their programs as being helpful in planning and guiding their activities.

Cancer coalition members that responded to the Coalition Members Surveys also indicated the top three program facilitators from their perspective. Slightly less than a third of respondents provided at least one facilitator. The most important facilitator mentioned by respondents was having the support of the local health department staff. Next, they mentioned having the support of the local coalition, such as strong coalition leadership, collaboration among members, and a good membership mix (for example, participation by minorities and national service organizations). Outreach efforts and the support of the general community were also named as important enablers to the program's success. A few respondents mentioned the availability of funding and the support of the medical community as facilitators.

DHMH support facilitators. When asked specifically about the types of support provided by DHMH that have facilitated the implementation of the local Cancer programs, many coordinators cited the open and direct communication and technical support provided by DHMH as being very helpful. The coordinators indicated that DHMH staff are easily accessible and very responsive in addressing programmatic questions or issues. Many coordinators also noted the development and training for the databases, particularly the client database, as being particularly noteworthy. The monthly teleconferences, regional meetings and site visits were viewed by some as helpful, particularly where information can be shared peer-to-peer about how the jurisdictions handled various issues faced by the programs.

Some Cancer program coordinators mentioned the helpfulness of the Health Officer Memos, and they particularly appreciated the database that was developed to reference the various topics for the memos so that research could easily be completed to find the appropriate memo. A few coordinators mentioned DHMH's assistance in obtaining speakers for local meetings, developing contract templates and clinical guidelines, and orientation for new staff as helpful in implementing the local Cancer programs.

Local support facilitators. When asked what local support they have received to implement their local Cancer programs, many of the Cancer coordinators mentioned receiving support and leadership from their local health officers in implementing and operating the program. Additionally, health officer and local commissioner support and tolerance in providing coverage of cost overruns when funding became an issue were mentioned as a facilitator. Some of the coordinators reported strong support from their local hospitals and physicians, both in providing services and in networking and leveraging local resources.

Having coalition members with similar goals for the local program and community organizations that opened their meetings for outreach efforts were also mentioned as strong supporters in implementing the program.

State DHMH staff perspective. During in-depth interviews, State level Cancer Program staff identified a number of factors that enabled the local-level implementation of the Cancer program. Most of the Cancer staff said they thought the timely and collegial guidance they provided to local programs was helpful in the implementation of the program. Such guidance included: clinical guidance, database guidance, and various documentation (updated and easy-to-understand template contracts, guidance documents, and health officer memos). They added that they thought the guidance was provided through timely and efficient communication and that the communication network that they built allowed for ease of information dissemination. Similarly, Cancer staff stated that they thought providing counties with immediate feedback was helpful. One Cancer staff member also mentioned that s/he thought the program design was helpful in that it gave the counties the flexibility to decide how they wanted to spend their funds.

General barriers. Survey respondents were also asked to list three barriers to program implementation, excluding budget, staffing, and community support, which were probed separately. Most respondents were able to provide one or two barriers to Cancer program implementation, and some were able to provide three barriers. The most commonly stated barrier to Cancer program implementation was the time and effort required to use the Cancer Education Database (Table 4-26). It appears that Cancer program coordinators find reporting activities into the Cancer Education Database to be time consuming, and that the information that is gleaned from the database relative to the time taken to enter data into it is minimal from their perspective. Additionally, having to track multiple data reporting systems for Cancer program activities is seen as an obstacle. Interestingly, when these same respondents were asked to rate their satisfaction with the Cancer Education Database as a reporting mechanism, most indicated high levels of satisfaction (73.9%; $M = 3.78$).

Difficulties in recruiting and retaining physicians, the lengthy procurement process, limited flexibility in local decision making, lack of patient follow-through to go beyond screening, and difficulties in developing and maintaining an active coalition were barriers listed by some respondents. Other barriers listed included lack of media coverage, difficulty getting the community involved in the program, difficulty coordinating service delivery across multiple locations, lack of funding, and cultural and language barriers. Several other barriers were listed by single respondents.

Table 4-25. Barriers to Implementing Local Cancer Programs

Barrier	Most Important	Second Most Important	Third Most Important	Total Mentions
The education database	3	4	0	7
Recruiting and retaining physicians	3	1	1	5
Procurement process	1	1	2	4
Limited local decision making flexibility	1	2	1	4
Lack of patient follow-through	1	2	0	3
Developing and maintaining active coalition	0	2	1	3
Lack of media coverage	1	0	1	2
Difficulty getting community involved	2	0	0	2
Difficulty coordinating service delivery in multiple locations	1	1	0	2
Lack of funding	2	0	0	2
Cultural and language barriers	0	0	2	2
Coalition membership requirements	1	0	0	1

Barrier	Most Important	Second Most Important	Third Most Important	Total Mentions
Not enough time	1	0	0	1
Lack of support from LHD	1	0	0	1
Lack of support from MOTA	1	0	0	1
Excessive paperwork requirements	0	1	0	1
Negative association with health dept within the community	0	1	0	1
Lack of reliable education data	0	0	1	1
Not enough staff	0	0	1	1
Total	19	15	10	44

Source: Cancer Program Coordinator Survey

Local Cancer program coordinators were given an opportunity to discuss program barriers further during in-depth interviews. The most common barrier that Cancer coordinators identified when asked what barriers they face in implementing their programs was funding issues. Coordinators indicated that there is often not enough funding to support the number of screenings requested in their jurisdictions. Not having funding for treatment makes it difficult to fully administer the local programs, because the local programs may not have readily available resources to offer if an individual receives a positive cancer screen. Recruiting providers and specialists to participate in the program can be problematic due to the low reimbursement rates. The funding for the local Cancer programs has remained flat for the past three years, but costs have risen, and it is affecting staff salaries and benefits, as well as the number of screening services the program can fund.

Similarly, when local health officers were asked during the in-depth interviews what barriers local Cancer programs face, many pointed to a lack of funding, as well. Specifically, local health officers suggested that the funds do not allow programs to provide services beyond screening, and that follow-up screenings for individuals who receive positive screening results during a cycle are not accounted for in subsequent program funding. Therefore, as the number of abnormal findings increases, more funds must be earmarked for repeat screenings, resulting in fewer funds available for new screenings. Similarly, fluctuations in funding were seen as a barrier for some local health officers who suggested that funding fluctuations create difficulties in maintaining staffing and interested community organizations and health care providers.

A few local Cancer program coordinators mentioned that they are challenged because the program was intended to be shaped to meet the local needs, but as time went on, they feel that it has become more prescriptive and the local programs are forced to look the same, with the same clinical standards, forms, contracts, and data gathering. Some discussed that the volume of data that must be reported is burdensome, and that the data entry system requires a lot of time to administer. Additionally, although program coordinators indicated that they receive appropriate guidance and support from DHMH, some indicated that the volume of information that they receive from the State is excessive. In particular, the number of Health Officer Memos that are sent to the local programs was described by some coordinators as “overwhelming.”

According to local program coordinators, hiring and the effects of staff changes have impacted a few of the local programs. The hiring process takes considerable time, and staff training for new hires delays the ongoing work of the program, causing the staff to feel pressure to catch up. Other program barriers identified by the local coordinators included challenges with maintaining an active coalition, difficulty getting clients to follow up after they have been screened, and the cumbersome nature of the grant application.

A few local health officers indicated that they have difficulty finding specialists in their jurisdictions that can provide the services needed under their Cancer programs. Other barriers mentioned included difficulties in reaching and gaining interest of target populations, issues with the rigidity of the administrative spending limits and how funds can be spent within the programs, and the time consuming reporting requirements for the local Cancer programs.

Cancer coalition members that responded to the Coalition Members Surveys were invited to list the top three program barriers from their perspective. Slightly less than a third of respondents provided at least one barrier. The most commonly mentioned barrier mentioned was inadequate funding, including the lack of timeliness and inequitable distribution of funds. The next most frequently mentioned response was ineffectiveness in outreach. Coalition-related challenges were a third important barrier, with dissatisfaction with the mix of members being a concern. Respondents also expressed a desire to see increased coalition membership and/or attendance at meetings. A few also mentioned that disagreement among members and lack of clarity about members' roles in the coalition are barriers to program implementation. Also mentioned were language or cultural barriers, lack of time or scheduling conflicts, lack of communication and leadership, and disinterest among potential or existing clients, which includes fearful attitudes. A few respondents mentioned as barriers the lack of personnel, the inability to provide treatment to screened clients, lack of support from the medical community, insufficient resources, and lack of transportation among target populations.

Government bureaucracy barriers. When asked whether they experience barriers in implementing their local Cancer programs due to government bureaucracy at the local level, most coordinators indicated that they do not. However, a few indicated that they do experience problems getting contracts approved, getting bills paid for providers, and resolving fiscal administration problems due to local requirements and policies. A few coordinators discussed areas where they lacked local support, particularly in getting grant monies released at the county level and being able to promptly execute contracts with providers.

Grant Requirement Barriers. Two main issues regarding the grant application requirements were identified by local Cancer program coordinators during in-depth interviews. First, many of the coordinators indicated that the grant application process is tedious, redundant and very labor intensive because the same information is requested in various sections of the applications. Second, some coordinators suggested that the grant review process is extremely detailed, resulting in a very lengthy review and approval process. Thus, often the awards are not made until October or November, reducing the period of time within which they can meet their performance goals by up to four months. The delay in funds also makes it difficult to retain provider contracts and to maintain continuity of program services. Interestingly, during in-depth interviews, State level Cancer program staff recommended removing some of the statutory requirements in the grant applications, suggesting that some of the items have not proven to be very useful for planning purposes and can create extra unnecessary work for applicants.

Staffing issues. On the surveys fielded by AIR, Cancer program coordinators were asked to provide information about their current staffing and to rate their agreement with statements regarding reasons for difficulties in hiring and maintaining staff. Almost three-quarters (70.8%) of respondents indicated that they have had staff vacancies during the past 12 months, two-thirds (61.9%) indicated that they have had staff turnover during the past 12 months, and almost half (41.7%) indicated that they currently have staff vacancies.

Approximately one-half of Cancer program coordinators expressed concern regarding their ability to offer competitive salaries ($M = 3.36$), but only one-third (36.3%) indicated concern about abilities to offer competitive fringe benefits packages to attract and maintain staff ($M = 3.00$). Difficulty hiring qualified staff ($M = 3.30$) and problems with availability of a limited pool from which to hire qualified staff ($M =$

3.13) were expressed by approximately one-half of respondents, and overall do not appear to be issues of great concern for Cancer program coordinators.

Community Sector Support. Cancer coordinator survey respondents were asked to rate the level of support (from very strong to very weak) that they receive from several community sectors. It appears that community support for local Cancer program efforts tends to be somewhat neutral from most of the sectors probed, and for most jurisdictions. Support from adults was rated that highest ($M = 3.83$), followed by support from community leaders ($M = 3.64$) and local media ($M = 3.22$). The sectors from which programs perceive the least strength in support are from youth ($M = 2.29$), school officials ($M = 2.63$), and local businesses ($M = 2.96$).

Respondents were asked to rate the extent to which a lack of support by the sectors affects program implementation. With the exception of adults (66.7%), local media (60.0%), and local businesses (55.6%), lack of support from the community sectors was seen as having an effect on program implementation by one-half or fewer of the respondents.

State DHMH staff perspective. Half of the Cancer program respondents mentioned a lack of resources, such as funding or staff, as a program-level barrier to implementation. For example, Cancer staff said there is staff turnover at the local level due to low salaries (for outreach staff and nurses in particular). Counties that are not self-ruled (i.e., they cannot develop their own pay scales) and smaller counties suffer more turnover because of employee dissatisfaction. With specific regard to funding, Cancer staff said that local programs do not know how much funding they will have in advance; with only two months notice, local program administrators have difficulty fostering allegiance among their employees. In addition, some county programs are unable to accept new patients because they only have the budget to fund those who are due for repeat visits in the coming year. A final barrier mentioned by Cancer staff related to health officer involvement. The respondent stated that they thought health officers, while they continue to be very knowledgeable, were more involved initially than they were at the time of the interview.

4.1.6. What Changes, if any, Should be made in the Cancer Programs?

4.1.6.1. Overview

Most of the changes that local Cancer program coordinators suggested were administrative in nature. The biggest concerns and requests for change related to funding. Other changes included reducing reporting requirements and clarifying the goals and vision of the Program including specification of the local goals as well as the overarching statewide goals.

4.1.6.2. Local Program Coordinator Suggestions

Most of the changes suggested for the Cancer programs were administrative in nature. In the interviews with the local Cancer program coordinators and local health officers, the biggest concern expressed was around program funding. These concerns include the local program funding levels and the need to establish a means to fund treatment when active cancer is identified. As such, many of their suggested changes to the Cancer program were around funding issues. The suggested changes included providing ways for a more timely dissemination of annual funds; extending the life of the funds across fiscal years so that programs may address any spikes in service demand; and reallocating resources across jurisdictions where the funds are not being used. Because the need for certain services is so dynamic, some coordinators mentioned that budgeting on such a shortened timeframe is extremely difficult, and not having the needs coincide with the budget could result in negative ramifications to local funding in further fiscal periods.

Coordinators who suggested that the CRFP make an attempt to identify a means to fund treatment services expressed a concern that the program currently has no solid options to provide treatment in the event active cancer is identified. They point to the breast and cervical cancer program that has dedicated treatment funds available, but several have suggested that perhaps the CFRP could consider consolidating the unobligated annual CRFP allocations for to create a statewide fund that each jurisdiction could access when an individual with lacking resources is identified with cancer and treatment is needed. If this is not a potential source of funding, coordinators suggested exploring access to Medicaid or Medicare resources, but acknowledged that this source requires a breadth of knowledge that is difficult for them to acquire.

Not having a source of funding for treating active Cancer patients was identified by some as making it difficult for the local programs to deal with cases of Cancer when they are identified. It also presents a philosophical dilemma for the Cancer coordinators and local officials when they are marketing an education and screening program, but cannot deal with the results of the screening efforts. Coordinators are concerned that people in the uninsured or underinsured population will not access the available screening services if they cannot be assured that they will receive treatment as needed.

Some local health officers recommended reducing the data reporting requirements for the local Cancer programs. It was suggested that if the reporting requirements for all program aspects were integrated into a single reporting system, it might ease the reporting burden. Furthermore, some feel that the reporting requirements for the education activities are excessive in comparison to the utility of the information.

Some local Cancer program coordinators mentioned that they would like more clarity regarding the philosophy for the Cancer program. The concerns focused on the need for a clear statement of the goals for the program, including specification of the local goals as well as the overarching statewide goals to be considered and addressed, and how the statewide goals can be addressed while still allowing for flexibility at the local level. Furthermore, they suggested that they would like information about how the local programs are progressing toward these goals as indicated by the program data.

4.2: To what Extent was Minority Outreach and Participation Achieved?

4.2.1. To what Extent were Racial and Ethnic Minorities Served Through the Local Cancer Programs?

4.2.1.1. Overview

Local program activities. The local cancer programs are required to include a section in their grant proposals indicating their plans for ensuring that minorities are served. All jurisdictions included these plans for all years. Grantees are additionally required to include educational and screening achievement goals for each year. Not all of the grantees included measurable achievement goals related to minority education and screening. However, it is clear from the data that minorities are being educated and receiving screenings through the local cancer programs:

- Minorities constituted about 47% (or 251,858 people) of those attending one-on-one or group cancer education
- Between FY2001 and FY2006, minority individuals received approximately 58% (21,780) of the screening tests.

Maryland cancer disparities by race. According to BRFSS data, Maryland's colorectal cancer screening rates are above average compared with other states. However, there remains a disparity in colorectal cancer screenings for African Americans. One of the focus areas of the CRF Cancer Program is to decrease the health disparities between different ethnic/racial groups. The clear disparity between

African American and White individuals in Maryland who were screened using colonoscopy or sigmoidoscopy in 2004 indicates continued need for focusing efforts on educating and screening minorities.

A health disparity exists in mortality rates for African Americans compared to Whites. In terms of health disparities for the targeted cancers, African Americans consistently have a higher mortality rate than their White counterparts, with the greatest difference appearing in prostate cancer mortality. The disparity in mortality rate for all cancers other than skin cancer is considerable. The disconnect between mortality rates and the percent screened may stem from the fact that screenings, while helpful in decreasing the number of cancer-related deaths, are just one of the factors that influence mortality rates. Additionally, increases in the percentage of people screened in a given year have long-term benefits that may help to decrease the mortality rate in the future, but will not provide an immediate impact in the given year.

4.2.1.2. Local Program Activities

The percent of minorities that are being educated by the programs has increased over the course of the program (Table 4-27). In FY2001, the percent of minorities educated by the CPEST grantees in Maryland (31.0%) was fewer than the percent of minorities in the State (36.7%). This remained the case in FY2002, although the percent of minorities educated throughout the State increased slightly to 35.0%. A changeover occurred in FY2003 when 44.5% of those educated were minorities. This increase was sustained during FY2004 (51.0%), FY2005 (51.7%) and FY2006 (50.8%).

A total of 19,315 cancer screening tests (approximately 57% of all screening tests) were provided to minority individuals through the Cancer Program. The percentage of screening services that were provided to minorities increased each year from FY2001 to FY2003, and remained stable from FY2003 through FY2006, and the percentage of minorities for whom screening services were provided was greater than the percentage of minorities in the State during each year. See Tables D-16 and D-17 in Appendix D for jurisdiction-level detail.

Table 4-26. Number and Percentage of Minority Individuals Served Through Cancer Program by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Number of minorities educated	4,757	22,548	45,323	56,872	58,181	64,177	251,858
Percentage educated who are minorities	31.0%	35.0%	44.5%	51.0%	51.7%	50.8%	47.3%
Number of screenings provided to minorities	416	4,416	5,556	4,951	4,150	2,291*	21,780
Percentage of screenings provided to minorities	41.8%	57.3%	58.8%	58.2%	58.9%	56.8%	57.7%

Source: DHMH Cancer Education and Screening Databases, November 2006; DHMH Breast and Cervical Cancer Database, April 2006

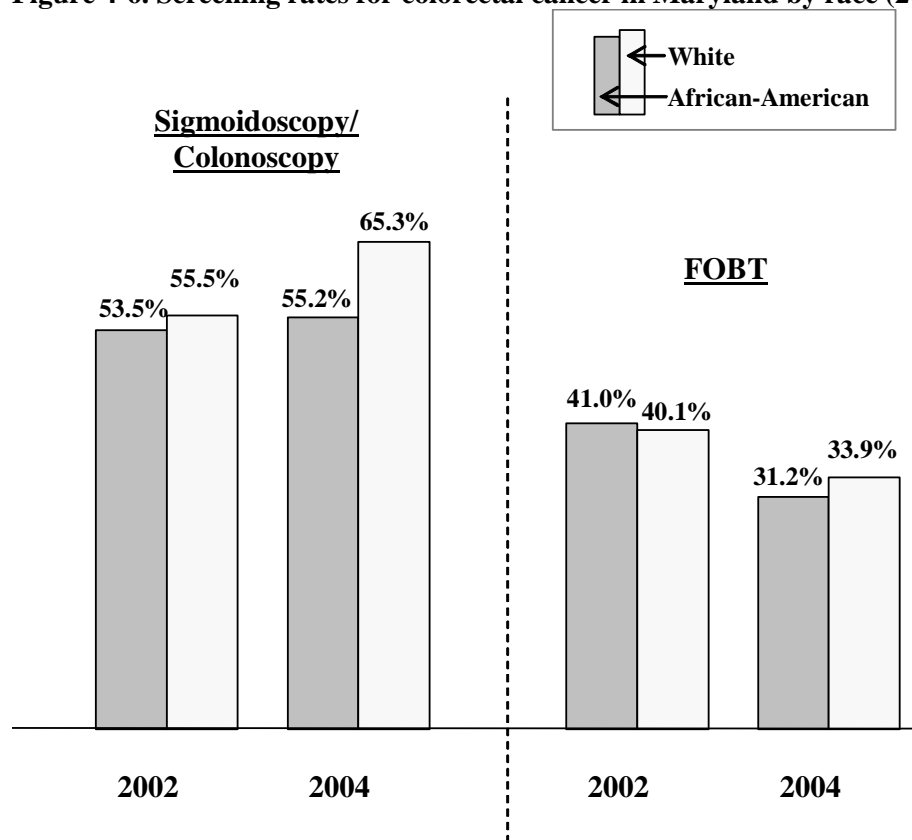
* = A breakdown of breast and cervical cancer screenings for minorities was not available for 2006, so that data is excluded here

4.2.1.3. Maryland's Cancer Disparities by Race

While, according to BRFSS data, Maryland's colorectal cancer screening rates are above average compared with other states, there remains a disparity in colorectal cancer screenings for African Americans. For both sigmoidoscopy or colonoscopy and FOBT screenings, the screening rates in 2002 and 2004 were similar (Figure 4-7). However, by 2004, the sigmoidoscopy or colonoscopy screening rate for Whites had increased substantially to 65.3%, while the screening rate for African Americans only increased to 55.3%. For FOBT, the screening rates decreased for both African Americans and Whites.

However, the decrease was less substantial for Whites (40.1% to 33.9%) than for African Americans (41.0% to 31.2%).

Figure 4-6. Screening rates for colorectal cancer in Maryland by race (2002 and 2004).



Source: BRFSS 2002 and 2004

Note: Confidence intervals are presented in Appendix C.

* Colonoscopy/Sigmoidoscopy for both sexes screened ever age 50+

** FOBT for both sexes in the past two years, age 50+

The CRF Cancer Program's Focus on Minorities. One of the focus areas of the CRF Cancer Program is to decrease the health disparities between different ethnic/racial groups. Research directly links access to health care and minority populations by indicating that racial and ethnic minorities have higher rates of poverty, lower education status, and less access to health care coverage as a source of primary care (Ward et al., 2004). In order to focus on decreasing these differences, the CRF Cancer Program focuses resources on providing no-cost screenings to uninsured and under-insured Maryland residents. Such a program is likely to benefit predominantly minorities who have less access to cancer screening coverage.

The disparity between the number of African American individuals in Maryland screened using colonoscopy or sigmoidoscopy in 2004 and their White counterparts displayed in Figure 4-7 indicates continued need for focusing efforts on educating and screening minorities. As DHMH indicated that the Cancer Program was the sole source of free screenings for colorectal cancer in Maryland, it is necessary for this program to continue to provide screenings in order to help close the gap.

As shown in Table 4-28, the percentage of colorectal cancer screens that were provided to African Americans ranged from 41.4% in FY2001 to 19.2% in FY2003. Since the inception of the program, approximately 23.7% of the screens were provided to African Americans. This is similar to the

percentage (23%) of African Americans 50 years of age and above in the Maryland population (U.S. Census Bureau, 2004).

The Cancer Program has been successful in providing a large number of free colorectal cancer screening tests throughout Maryland. The Cancer Program has focused its efforts on the uninsured and underinsured population, and it appears that the program benefits a greater proportion of all race/ethnic populations than their representation proportion in Maryland's population. However, more outreach activities may be desirable to African American communities in order to bridge the existing gap between White and African Americans in colorectal cancer screening rates. (See Tables D-18 through D-21 in Appendix D for jurisdiction level details).

Table 4-27. Percent of Colorectal Screening Tests Provided by Fiscal Year and Race/Ethnicity, and Census

Race	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total	2000 Census
White*	56.2%	66.7%	70.6%	71.0%	66.2%	62.2%	67.4%	64.0%
African American*	41.4%	23.7%	19.2%	20.3%	25.4%	29.3%	23.7%	27.9%
Hispanic/Latino	3.0%	24.5%	18.2%	14.9%	13.4%	10.9%	16.8%	4.3%
Asian*	1.4%	8.9%	9.4%	7.8%	6.7%	7.1%	7.9%	4.0%
Other**	1.0%	0.7%	0.8%	0.9%	1.7%	1.4%	1.1%	0.3%

Source: DHMH Cancer Screening Database, February 2007 and 2000 Census to show Maryland's race/ethnic population makeup

Note: Screenings for which the individuals did not indicate a race were excluded from the analysis

*Includes Hispanic/Latino

**Other includes, American Indian or Native Alaskan, Hawaiian, and Multi-race (indicates that more than one racial category was checked)

Mortality Rates. Cancer is the second most common cause of death in the United State after heart disease, yet the American Cancer Society suggests that at least half of the new cancer cases each year are caused by cancers that can be prevented or detected early through screening (American Cancer Society, 2007). Early detection increases the likelihood of surviving cancer, as survival rates are highly dependent on the stage of the cancer at diagnosis. There are three main stages of cancer: localized, regional, and distant. The localized stage is the most treatable stage and provides the highest chance of survival. Cancer screenings are an effective means for increasing early detection and helping to diagnose cancers while they are still in treatable stages. This in turn increases the chance of survival and helps to limit the number of cancer related deaths (Ward et al., 2004). The increased number of screenings conducted in a given year will not directly influence the mortality rate for that year, but will have long-term benefits that will be apparent in the future.

While screening rates in Maryland are generally higher than screening rates in other states and are higher than the national targets, the State has not achieved this standard in mortality related to the seven cancers targeted by the program. Mortality rates for many cancers remain higher than the Healthy People 2010 goal both in Maryland and nationally.

For all cancers (not only the seven targeted by the Cancer Program), the Maryland mortality rate of 194.9 per 100,000 people in 2003 was well above the National Healthy People 2010 objective of 159.9. For three of the seven cancers targeted by the Cancer Program (cervical, skin, and oral cancers), the mortality rates in Maryland and nationwide are so low that differences between Maryland, other states, and the Health People 2010 objective are not meaningful. The rates for each cancer were lower than four people per 100,000 in 2003.

For lung, breast, colorectal, and prostate cancer, more than half of the states in the nation have a better mortality rate than Maryland. However, for prostate cancer, although Maryland is ranked 9th highest, the mortality rate of 28.2 people per 100,000 is lower than the National Healthy People 2010 Objective of

28.8 per 100,000, but exceeds the Maryland 2010 goal. The lung cancer mortality rate (57.4 per 100,000) is farthest from the objective (44.9 per 100,000) than any other targeted cancer.

Table 4-28. Mortality Rates per 100,000 People Maryland and Nationally by Race and Cancer Type (2003).

Type of Cancer	MD Rank*	MD Mortality Rate	MD Mortality Rate African American	MD Mortality Rate White	National low Mortality Rate	Healthy People 2010 Objective
All Cancers ¹	23	194.9	228.2	188.7	144.9	159.9
Lung	20	57.4	64.5	56.5	24.7	44.9
Breast	14	26.7	35.0	24.3	16.7	22.3
Colorectal	24	19.3	26.5	17.7	14.6	13.9
Prostate	9	28.2	52.3	23.8	16.1	28.8
Cervical	30**	2.0	3.6	1.4	1.3	2.0
Skin	34***	2.5	N/A	3.2	2.0	2.5
Oral cancer	31***	2.4	2.9	2.4	1.6	2.7

Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates are age-adjusted to the 2000 US standard population (19 age groups: <1, 1–4, 5–9, 80–84, 85+).

*Rank out of all 50 states and District of Columbia. Rank measure from state with highest mortality rate (1) to state with lowest mortality rate (52).

** Rank out of 38 states due to the fact that there were less than 15 deaths per year over rate period in some states.

*** Rank out of 48 states due to the fact that there were less than 15 people deaths per year over rate period in some states.

¹ "All cancers" refers to all cancers, not only the seven targeted by the Cancer Program.

As Table 4-29 shows, a health disparity exists in mortality rates for African Americans, who had a mortality rate of 228.2 for all cancers, compared to Whites, who had a lower mortality rate of 188.7. In terms of health disparities for the targeted cancers, African Americans consistently have a higher mortality rate than their White counterparts, with the greatest difference appearing in prostate cancer mortality.

Health disparities, stemming from socioeconomic status, race/ethnicity, and the combination of these two factors, influence access to cancer screenings, stage of diagnosis, access to appropriate treatment, and ultimately the survival of minority populations battling with cancer.

Numerous studies have indicated the mortality rates for African Americans are noticeably higher than for White Americans (Shavers & Brown, 2002; Siminoff & Ross, 2005; USDHHS, 2000; Ward et al., 2004.). African American men and women have the highest death rate for all types of cancer combined compared to all other racial and ethnic groups in the United States. African American males have a death rate 1.4 times higher than White males, and African American females have a death rate 1.2 times higher than White women for all types of cancer. Specifically, African American males have a 1.37 times higher death rate for lung and bronchus cancer and 2.42 times higher death rate for prostate cancer than White males. African American women have a 1.3 times higher death rate for breast cancer and 2.2 times higher death rate for cervical cancer than White women (Ward et al., 2004).

The difference in preventative measures used by different racial/ethnic groups is one contributing factor leading to differences in the stage of diagnosis of cancer, and consequently, mortality rates. Surveillance, Epidemiology, and End Results (SEER) data from 1996-2000 suggests that nationally, 42 % of colorectal cancer was diagnosed for White individuals in the localized (most treatable) stage and only 19 % of cases were diagnosed in the distant (least treatable) stage. In contrast, 39 % of colorectal cancer cases for both African American and Hispanic individuals were diagnosed in the localized stage and 25% (African American) and 22% (Hispanic) were diagnosed in the distant stage (Ward et al., 2004). Early detection is one of the key factors for survival as the stage at diagnosis is one of the factors that ultimately influence the mortality rates.

Conclusion. The Maryland Cancer Program has focused on providing education and screenings to Maryland residents in order to increase the chance that cancers will be diagnosed in treatable stages. The focus on detecting cancer early has been directly linked in medical reviews to increases in life expectancy and decreasing mortality rates caused by cancer (American Cancer Society, 2007). The program focuses on seven types of cancer linked to tobacco use, including colorectal, breast, cervical, lung, prostate, and skin cancers.

The number of cancer screenings provided by the Maryland Cancer Program illustrates the tremendous effort that Maryland has devoted to combating cancers that may be caused by smoking. Since the program's inception, it has provided screenings to individuals who might not have otherwise been screened. In the year 2004, Maryland ranked among the top 10 states with the highest percentage of screens conducted for breast and colorectal cancers. However, the percentage of African Americans who have received screening was lower than that of their White counterparts, especially in colorectal cancer screening. To help minimize the disparity, the Cancer Program specifically targets uninsured and underinsured population in Maryland to provide free screenings. While it is likely that such program should benefit minorities more than it helps the White population, there has not been evidence showing the closing of the gap.

Maryland ranks high in screening rates compared to other states across the nation, yet the mortality rates remain above the national average for four of the deadliest cancers targeted by the Cancer Program and for all cancers combined. This lack of congruence between mortality and screening rates is mimicked for minorities. The disparity in mortality rate for all cancers other than skin cancer is considerable. The disconnect between mortality rates and the percent screened may stem from the fact that screenings, while helpful in decreasing the number of cancer-related deaths, are just one of the factors that influence mortality rates. Additionally, increases in the percentage of people screened in a given year have long-term benefits that may help to decrease the mortality rate in the future, but will not provide an immediate impact in the given year.

4.2.2. What Factors Contributed to, or Hindered, Minority Outreach and Participation in the CRFP Cancer Programs?

4.2.2.1. Overview

Outreach facilitators. Most of the local programs actively outreach to minority populations in their communities. Outreach facilitators identified by local program coordinators included working with faith-based and community organizations, taking culturally appropriate perspectives on outreach, and opportunities to conduct outreach in person and face-to-face.

Outreach barriers. One barrier to conducting outreach relates to the lack of available treatment funding, presenting programs with a dilemma of screening individuals who do not have resources to obtain treatment if they test positive. Other barriers include competing health priorities for minority populations and lack of minorities in some jurisdictions.

MOTA. Satisfaction with MOTA activities to enhance outreach at the local level is mixed. While some local program coordinators indicate that MOTA assists with recruiting and maintaining minority representation on coalitions, as well as staging and implementing outreach activities, others indicate that MOTA does not assist with minority outreach in their jurisdictions.

4.2.2.2. Outreach Facilitators

Most of the Cancer program coordinators reported that their local programs perform outreach to their communities and to minority populations. Many of the coordinators work with churches in minority

communities and minority organizations to provide educational services and inform the community about the screening services that are available for uninsured or underinsured persons. Some of the activities mentioned most are participation in health fairs; developing community newsletters; advertising in partner's newsletters; presentations by Cancer survivors and others who have been screened through the program; working with the local NAACP chapter; appearances on local TV and radio programs; and doing health education in work areas where minorities are working (working poor and may not have health insurance). Several of the coordinators mentioned that program staff includes individuals who are bilingual and bicultural and come from the community, particularly African American, Hispanic and Korean. The staff has relationships with existing local Health Department patients that are based on trust in the system.

Some coordinators reported that they do not have to perform much outreach to minorities to expend their grant funding, as they receive age appropriate referrals from the local Health Department's Breast and Cervical Cancer programs, as well as referrals from physicians in the federally-funded health clinics and hospitals. Many of these referred participants are minorities.

Some of the local program coordinators discussed outreach based on cultural perspectives – knowing the minority population's habits for receiving information, and cultural traits on how they will react to specific messages, such as approaching African Americans in barbershops, beauty salons, and the subway, and the Asian community through their pastor who is able to translate program services and provide translation assistance if the patient wishes to come for screening services.

Consensus among Cancer program coordinators is that personal contact is the most effective form of outreach. Speaking with someone face-to-face provides an opportunity to respond to specific questions about their personal lives or their personal situation, and these questions are very sensitive, especially when talking about health matters. Additionally, reaching out to minority populations where they are indicates that the program staff is putting itself out there for the benefit of the individual, rather than placing the responsibility on the individual to come to the program.

Conversely, some coordinators suggested that activities such as putting ads in newspapers, doing mass mailings, and sending emails are not effective modes of outreach. A few coordinators indicated that health fairs and large group activities are also less effective than personal contact situations. For example, people who attend health fairs may receive information, but there is no way of determining whether any steps toward Cancer prevention or detection were subsequently made.

State level Cancer program staff identified two facilitators to minority outreach and participation in the program. First, one staff member stated that counties are aware that reaching minorities is a major goal of the program. Second, it was mentioned that colorectal cancer screening was recently added to the list of services to be evaluated by the national organization that assess clinical practices; this is likely to increase screening among minorities.

4.2.2.3. Outreach Barriers

Barriers to minority outreach mentioned by local Cancer program coordinators included the dilemma involved with screening individuals who do not have the funds for treatment if they test positive. Some counties are not taking new patients because they only have the budget to fund repeat visits in the coming year. With respect to program participation, it was suggested that low minority participation may be because this population has a plethora of more pressing issues to deal with in their lives, because there is competition for funds among minority groups and minority-focused organizations, and because those organizing coalition meetings are not accommodating the needs of minorities (such as in terms of location and cost). Finally, it was suggested that in some counties, there are few minorities, and/or many non-minorities who are underserved and require services.

4.2.2.3. MOTA

Where MOTA programs are present, some Cancer program coordinators indicated that MOTA assists with recruiting minority individuals into the program and onto the coalitions. Activities that MOTA engages to assist in minority outreach include staging events where recruitment takes place, active recruitment within the community or medical systems, and providing materials such as an article in a newsletter about March for Colorectal Cancer Awareness Month. Some coordinators report that the MOTA vendor is not involved with minority recruitment. When asked on the Cancer program coordinator survey about their satisfaction with the assistance they receive from the MOTA program to reach out to minority populations in their jurisdictions, Cancer coordinators expressed neutrality in their satisfaction with the assistance they receive from the MOTA program to provide outreach to minority populations in their jurisdictions ($M = 2.76$) and to maintain an ethnically diverse coalition ($M = 2.75$). While approximately one-quarter (23.5%) of respondents indicated that they are satisfied with assistance they receive from MOTA in providing outreach, over one-third (35.3%) indicated dissatisfaction. Approximately one-third (31.3%) indicated satisfaction with MOTA's assistance in maintaining an ethnically and racially diverse coalition, and a slightly larger proportion (43.8%) indicated dissatisfaction with this issue.

When asked about barriers to minority outreach, half of the State Cancer Program staff respondents stated that MOTA experiences vary from county to county due to a lack of consistency across programs, and that the varied experiences depend upon local leadership.

4.2.3. What Changes, if any, Should be Made Regarding Minority Outreach and Participation in the CRFP Cancer Programs?

4.2.3.1. Overview

Local programs are doing a good job of reaching minorities in their jurisdictions. However, Additional training and technical assistance around reaching hard to reach minorities, and working around language barriers may benefit the programs. In smaller jurisdictions, where traditional minority populations are sparse, redefining "minority" may enhance their abilities to conduct outreach to other underserved populations. DHMH CRFP staff suggested that coordinating needs and expectations between local programs and MOTA could help enhance outreach. Additionally, providing ways for providers to be more active in minority outreach was suggested as a local level change that could improve outreach.

4.2.3.2. Local Cancer Program Coordinators Suggestions

Based on the data from the Cancer Screening and Cancer Education Databases, the local Cancer programs are doing a good job of reaching minorities in their jurisdictions. The local Cancer program coordinators indicated that as the CRF Cancer program has matured, so have the coordinators and coalitions in performing minority outreach. Most reported their greatest success is in reaching the African American populations, primarily through minority churches, barbershops, beauty salons and word-of-mouth, but they have some degree of difficulty reaching out to other minorities and cultures. Through trial and error, some coordinators have identified approaches that more adequately address the cultural issues of the Hispanic population (more of a family focus), but continue to struggle with ways to reach other populations, particularly those with significant language barriers. Additional training or technical assistance, or perhaps peer consultation among coordinators with significant similar populations may help programs to overcome these issues.

In more urban/suburban areas of the state, there are greater numbers of Hispanic, Native American, Korean, Chinese, and Haitian populations than in rural areas, so outreach to these populations is more difficult for some of the smaller and more rural jurisdictions. Some local coordinators suggested that the

emphasis on reaching minority populations should be relaxed where the minority populations comprise a very small proportion of the overall populations. Another suggestion was to broaden the definition of “minority” to include poor and impoverished individuals.

4.2.3.3. DHMH Cancer Program Staff Suggestions

Most of the State Cancer Program staff made recommendations on ways to improve minority outreach and participation in the program. They suggested that perhaps MOTA could help to ensure a common experience across counties, and that more efforts need to be made by private and primary care providers to identify minorities for screening as they come into the health care system. Such providers can monitor their patient data, evaluate whether they have screen minorities adequately, and improve upon the number screened. Finally, one State Cancer staff member suggested implementing a pay for performance system within which programs that are able to secure representative participation in their coalitions are rewarded.

4.3: How well did the Local Community Health Coalitions Work?

4.3.1. To what Extent did the Local Health Coalitions Reflect the Diversity of Each Jurisdiction?

4.3.1.1. Overview

Most of the coalition lists for local cancer programs included information about the race of each participant. To examine the extent to which the coalitions represented the diversity of their jurisdictions, racial diversity of the coalition as a percent of coalition members was compared to the racial diversity of each coalition’s jurisdiction.

The most highly represented races/ethnicities among coalition members are White and African American. This did not change from FY2002 to FY2006. Throughout Maryland, the representation of African Americans in cancer coalitions was similar to the representation of African Americans in the Maryland population. The proportion of Hispanic/Latino cancer coalition members in FY2002 was similar to the proportion in Maryland’s population, but subsequent years showed a reduction in the proportion, resulting in a slightly lower representation in coalitions than in the Maryland population. A similar trend was noted with respect to Asian American cancer coalition membership. Conversely, the proportion of Native American cancer coalition membership has remained consistently higher than the proportion of Native Americans in the Maryland population.

4.3.1.2. Coalition Representation

The most highly represented races/ethnicities among coalition members are White and African American (Table 4-30). This did not change from FY2002 to FY2006. Throughout Maryland, the representation of African Americans in cancer coalitions was similar to the representation of African Americans in the Maryland population. In most jurisdictions there were proportionally more African American cancer coalition members than that jurisdiction’s African American population. Baltimore, Cecil, and Montgomery Counties saw increases in the proportion of African American cancer coalition members from FY2002 to FY2006, while Allegany, Carroll, Howard, and Somerset Counties saw decreases. The proportion of African American cancer coalition members in most other counties remained relatively stable from FY2002 to FY2006.

The proportion of Hispanic/Latino cancer coalition members in FY2002 was similar to the proportion in Maryland’s population, but subsequent years showed a reduction in the proportion, resulting in a slightly lower representation in coalitions than in the Maryland population. A similar trend was noted with respect to Asian American cancer coalition membership. Conversely, the proportion of Native American cancer

coalition membership has remained consistently higher than the proportion of Native Americans in the Maryland population. It should be noted that in counties with small coalition memberships, and with small minority populations within the jurisdictions, it may be difficult to maintain representation of all racial minority groups within the coalitions. See Tables D-22 through D-26 in Appendix D for jurisdiction-level detail.

Table 4-29. Race/Ethnic Makeup of Cancer Coalitions by Race/Ethnicity, Fiscal Year, and Census

Race/Ethnicity	FY2002	FY2003	FY2004	FY2005	FY2006	2000 Census
African American	30.5%	28.6%	30.5%	31.1%	28.7%	27.9%
Hispanic/Latino	5.6%	4.0%	3.2%	3.6%	3.5%	4.3%
Asian	5.3%	4.0%	3.5%	4.2%	3.8%	4.0%
Native American	4.8%	1.4%	1.6%	3.6%	1.3%	0.3%
White	53.7%	62.1%	61.1%	57.4%	62.8%	64.0%
Number of coalition members indicating race	374	807	855	883	712	n/a

Source: Annual Cancer Grant Proposals and 2000 Census, to show Maryland's race/ethnic population makeup

Some coalition lists did not indicate the racial breakdown of coalition members. Note that the calculations used in this section include only members for whom race/ethnicity was indicated. Therefore, the total number of coalition members on any particular coalition may be greater than the number of coalition members included in this section.

Some of the Cancer program coordinators indicated during in-depth interviews that they work with their MOTA grantees to enhance the diversity on their local Cancer coalitions. Much of those recruitment activities are conducted through churches. MOTA vendors also have worked with the local program to plan and hold events to try to recruit minorities to both participate in the coalition and to apply for mini grants that are available through the local program.

Findings from the Coalition Members Surveys indicate that more than half (55.2%) of the organizations represented on the local CRFP Cancer coalitions primarily serve minority populations. Many of the organizations represented have a primary focus on serving medically underserved (44.4%) and low income (45.9%). This suggests that Maryland's priority populations are being represented on the coalitions. See Table A-1 in Appendix A for jurisdiction level details.

4.3.2. What was the Extent of the Active Participation by Community Organizations on the Local Cancer Coalitions?

4.3.2.1. Overview

The frequency with which local programs meet annually provides ample opportunity for coalition members to be active participants. Almost all of the coalition members that responded to the Coalition Members Survey indicated that they attended at least one coalition meeting in the year prior to the survey. The coalitions are comprised of individuals from multiple community sectors. Although, according to local Cancer program coordinators, the main reason that coalition members joined the coalitions early on was because they were interested in obtaining funding, over time, the coalition members have become people who have a vested interest in cancer screening, prevention, treatment, and education.

4.3.2.2. Local Meeting Frequency and Publicity

According to the surveys conducted with Cancer program coordinators, almost one-half (41.7%) of the Cancer programs hold both coalition and subcommittee meetings. Most of the coalitions (58.3%) meet at

least four times per year, with the remainder meeting three (12.5%), two (25.0%), or one (4.2%) times per year. Similarly, most subcommittees (90.0%) meet at least four times per year, with a few meeting two (10.0%) times per year. Most of the local Cancer coalition member (81.9%) respondents to the members survey indicated that their coalitions meet at least four times per year, and approximately one-half (41.8%) of members belonging to jurisdictions with four or more meetings per year indicated that they go to all of the meetings, and 89% of respondents indicated that they went to at least one meeting in the past year. (See Table A-2 and A-3 in Appendix A for jurisdiction level details).

Local Cancer programs use multiple modes for publicizing and reminding members of upcoming coalition meetings (Table 4-31). The most common ways of publicizing meetings are reminders at meetings (66.7%), word of mouth (66.7%), email or internet (62.5%), and mailings (58.3%). Some respondents reported publicizing meetings through local media (16.7%), public posting (12.5%), and by telephone (4.2%). Other ways of publicizing meetings included invitations being sent out and partner newsletters.

A similar pattern emerged with respect to reminding coalition members of upcoming meetings. The most common methods indicated by the local program coordinators were reminders at meetings (79.2%), email or internet (66.7%), mailings (66.7%), and word of mouth (50%). Local media (12.5%) and telephone (8.4%) were indicated by few as their source for sending reminders. No respondents indicated using public postings or any other methods for reminding members of upcoming meetings. With the exception of word of mouth and reminders at meetings, the pattern of results was similar among coalition members' responses to the question of how they are reminded of upcoming coalition meetings (see Table A-4 in Appendix A for jurisdiction-level detail).

Table 4-30. Sources of Meeting Publicity and Meeting Reminders for Cancer Coalition Meetings

Sources for Providing Meeting Information	Coalition Coordinators		Coalition Members
	Publicity (N = 24)	Reminders (N = 24)	Reminders (N = 194)
Reminded at meetings	66.7%	79.2%	42.3%
Word of Mouth	66.7%	50.0%	17.0%
Email/Internet	62.5%	66.7%	68.6%
Mailing	58.3%	66.7%	41.8%
Local Media	16.7%	12.5%	3.1%
Public Posting/Bulletin Board	12.5%	0.0%	2.6%
Other	12.5%	0.0%	1.5%
Meetings are not publicized	12.5%	—	—
Telephone	4.2%	8.4%	12.9%

Source: Local Cancer Coordinators Survey and Local Coalition Members Survey

4.3.2.3. Community Representation on Coalitions

According to local Cancer program coordinators, the local CRF Cancer coalitions are comprised of individuals from varied backgrounds. All coalitions include members of the local health departments and health care workers other than physicians. Most coalitions also include members from non-profit organizations (95.8%), hospitals (91.7%), faith-based organizations (87.5%), and physicians (58.3%). Approximately one-half of coalitions contain members who represent local elected officials (50.0%), colleges or universities (50.0%), community-based organizations (45.8%), schools (41.7%), law enforcement (41.7%), and substance abuse agencies (41.7%). The least represented groups on coalitions include grassroots organizations (37.5%), local businesses (29.2%), youth organizations (25.0%), and media (8.3%). Other Cancer coalition members include the cancer survivors, parks and recreation, Departments of Social Services, and MOTA grantees (Table 4-32).

While between 80.0% and 100.0% of respondents indicated that most types of coalition members are active contributors to their coalitions, approximately one-half of respondents indicated that the coalition members representing local businesses (42.9%) and media (50.0%) are not active contributors to their coalitions. The coalition members who responded to the Coalition Members Survey indicated what organizations they represented. According to their responses, almost all jurisdictions have coalition representation from non-profit organizations. However, the percent of jurisdictions that had respondents from each of the other categories of representation ranged from zero (media representation) to 75% (local health department and health care). If it is assumed that members who are active on the coalitions would be likely to respond to a survey about their participation, then the levels of activity assumed by local coordinators may be overstated. See Table A-7 in Appendix A for jurisdiction level detail.

Table 4-31. Cancer Coalition Member Representation and Activity

Community Segment	Coordinators Indicating Represented on Coalition (N = 24)	Coordinators Indicating Active on Coalition	Jurisdictions with Representative Survey Respondent (N = 24)
Local health department	100.0%	100.0%	75.0%
Health care	100.0%	95.8%	75.0%
Non-profit organizations	95.8%	91.3%	95.8%
Hospitals	91.7%	95.5%	—
Faith-based organizations	87.5%	100.0%	54.2%
Physicians	58.3%	85.7%	—
Local elected officials or government	50.0%	95.0%	25.0%
Colleges/universities	50.0%	83.3%	41.7%
Community-based organizations	45.8%	90.9%	50.0%
Schools K-12	41.7%	90.0%	12.5%
Law enforcement	41.7%	90.0%	20.8%
Substance abuse agencies	41.7%	80.0%	20.8%
Grassroots organizations	37.5%	100.0%	41.7%
Other (specify)	29.2%	71.4%	62.5%
Local businesses	29.2%	57.1%	41.7%
Youth organizations	25.0%	100.0%	8.3%
Media	8.3%	50.0%	0.0%

Source: Local Cancer Coordinators Survey and Coalition Members Survey

Cancer program coordinators were asked about their coalition membership during in-depth interviews. When asked why coalition members joined the local Cancer coalitions, many Cancer coordinators indicated that when the local coalitions were forming, the main reason that coalition members joined was because they were interested in learning if they could obtain or increase their funding for cancer projects. However, as time went by and the local programs developed their funding initiatives toward education, outreach and screening programs, and the amount of the CRFP grants were depleted or diminished, coalition members who joined solely to attempt to gain funding left the coalitions. Currently, the coalition members are people who have a vested interest in cancer screening, prevention, treatment, and education. These individuals are often personally affected by cancer, representatives of the minority community interested in getting services for people in their community who do not have resources, or members of organizations (such as the American Cancer Society) that have a focus on cancer.

Some coalition members were invited to join the coalitions at the start of the programs, to get the programs up and running, and have maintained their positions on the coalitions. A few coalition members came from groups or coalitions that already existed prior to the initiation of the CRF Cancer programs. In addition to the types of members already mentioned, the coalitions contain representatives from hospitals, physicians and healthcare providers, local county government, Hospice, and legislatively required participants who are unified in their concern about Cancer control.

Local CRFP Cancer coalition members were asked about how they were invited to join their coalitions on the Coalition Members surveys. The most common response was that members were recruited to join the coalitions by the local health department (36.0%), followed by being recruited through their own organizations (29.4%). Some members (10.7%) were not recruited to the coalition, but are there as part of their job description. An equal proportion of respondents (7.9% each) indicated that they were recruited by MOTA or by another coalition member. Other ways of being recruited to join the CRFP Cancer coalition included through another local coalition (3.7%), through a family member (0.9%), or other unspecified (3.3%) (See Table A-8 in Appendix A for jurisdiction level detail).

4.3.3. To what Extent did the Local Health Coalitions participate in the Development of Cancer Control Efforts?

4.3.3.1. Overview

Coalition members are an integral part of the planning process for the local Cancer programs. They assist in planning and development of the local programs as well as providing input about the needs of their communities.

4.3.3.2. Local Program Coordinator Perspective

Some local Cancer program coordinators indicated that the main reason that coalition members currently join the local Cancer coalitions is to help plan and design the local programs. According to the Cancer coordinator survey results, almost all (90.9%) program coordinators find coalition members' input into the program planning to be important. During the in-depth interviews, a majority of the Cancer coordinators reported their coalition members are very helpful to the local program. Many mentioned that their coalition members participate in planning for the program by developing action plans, mission and vision statements, policy and procedures on cancer education, and developing new brochures and advertising. Some mentioned that coalition members like to be part of the decision-making process, and areas specifically mentioned were priorities for funding, identifying potential funding sources, and developing strategies for dealing with cancer-related issues. Other coalition members are active in providing outreach and health education in the communities, planning and participating in health fairs, and making presentations for the program. Many of the coordinators indicated that contributions from that the Black churches have been an important aspect of their programs' outreach and education activities. Some coordinators mentioned that their coalition members network with the various service and health care providers in their jurisdictions, sharing information about their programs and working to leverage resources (financing for projects of mutual interest, relationships and trust, collaboration, sharing expertise, and learning experiences).

In addition to assisting in the planning and development of the local programs, many of the coordinators indicated that one of the most significant contributions the coalition has made to the program is providing input about the needs of the community. The members identify the needs and approaches that need to be used for the different populations (Hispanic, African American, Asian, Native American), and bring the perspective of a person without insurance and other resources into perspective, grounding the program in what patients have to deal with, or explaining issues faced by caregivers. A few coordinators also mentioned the linkages to care and support for each other that have occurred among the provider community through the coalition membership. The various organizational members have stepped up to the plate to form a service system that will not leave the patient floundering.

4.3.3.3. Local Coalition Members Perspective

Coalition members were given an opportunity to provide their perspectives on the extent of their activity and contribution to the local Cancer coalitions. Regarding coalition meetings, cancer coalition members

expressed satisfaction with the agendas and minutes of meetings ($M=4.36$), as well as with the format ($M=4.22$), frequency ($M=4.23$), and time of day of the meetings ($M=4.11$). Members also expressed satisfaction with the capacity of the meeting rooms ($M=4.31$), the way in which they are informed about meetings ($M=4.44$), and the geographic location of the meetings ($M=4.39$). Regarding outreach to minority communities, respondents indicated that they were satisfied with efforts of the local programs ($M=4.25$) (See Table A-9 in Appendix A).

When asked to indicate their level of satisfaction with general member contribution, coalition member respondents expressed satisfaction that members contribute items to the meeting agendas ($M=4.06$) and the chairperson encourages discussion of the items ($M=4.35$). They were satisfied that members are able to provide input into developing CRFP plans ($M=3.92$) and designing local programs ($M=3.92$), as well as with the ability to provide input during their implementation ($M=4.00$). Coalition members responded that they were satisfied that members' ideas are incorporated into the local program plan ($M=4.02$), its design ($M=3.98$), and implementation ($M=3.97$). They were also satisfied that the mission, vision, and value of the program is clearly communicated to members ($M=4.22$) (See Table A-10 in Appendix A).

Regarding personal contribution, members expressed satisfaction with the level to which they have personally contributed items to the meeting agendas ($M=3.81$) and have participated in meetings by speaking on the agenda items ($M=4.03$). They feel satisfied with the degree to which their contributions are taken into account for local program planning ($M=3.93$), design ($M=3.76$), and implementation ($M=3.76$) (See Table A-11 in Appendix A).

4.3.3.4. Local Coalition Meeting Observation

Observations of a selection of CRFP Cancer coalition meetings revealed that, in general, individuals are invited and encouraged to contribute to meetings. In smaller jurisdictions, the meetings appear to be less formal and structured, whereas in the larger jurisdictions, the format was more presentation oriented. In most jurisdictions, the individual leading the meeting went over the screening accomplishments for the period between the prior and current meetings, followed coalition members discussing their activities during that same period. In many cases, coalition members would present an issue or barrier to their plans, or an issue that they would like to work on, and discussion of resolutions and ideas among all attendees followed.

4.3.4. What Factors Contributed to, or Hindered, the Effectiveness of the Local Health Coalitions?

4.3.4.1. Overview

Coalition members provide valuable input into planning and implementing program activities. Having coalition members who are service providers assists with these efforts. However, finding times for coalition meetings that promote attendance, getting the members to take more of a leadership role in some of the Cancer program initiatives and trying to find ways to keep members interested and participating over time has been challenging. According to State level CRFP Cancer staff, there is a lack of consistency in implementation resulting in varying coalition experiences from county to county.

4.3.4.2. Local Health Coalition Facilitators

During in-depth interviews, some of the coordinators spoke of the efforts coalition members were making, both in the coalition and in subcommittees to develop action plans, mission and vision statements, and to develop and provide input on strategies for the Cancer program. A few of the coordinators spoke of the individual contributions made by members to provide advice and counsel in developing programs to address new types of cancer (physicians providing specific medical input);

professionals providing media advice; and an attorney assisting with contract development. The coalition members provide valuable input into planning and holding events in the community to make the most of the programs' limited resources.

Participation of service provider representatives in the coalition helps to facilitate interagency communication and build networks to establish linkages to care and support and leveraging financial resources. A few coordinators spoke of coalition involvement in setting priorities for funding and of member bringing grant opportunities to the coalition's attention. Some of the coalitions also are active in raising awareness of the Cancer program in their communities by disseminating information, participating in Health Fairs, and participate in outreach programs by doing presentations.

4.3.4.2. Local Health Coalition Barriers

During the in-depth interviews, the local Cancer program coordinators expressed wide-ranging responses about the operations of the coalitions. Coordinators expressed that activity levels of coalition members ranged from providing full support for the coalitions to passive attendance to meetings. Some Cancer program coordinators questioned the need for local coalitions. Many of those not questioning the need for a coalition mentioned, however, that there have been numerous issues raised in trying to get the coalitions to operate as anticipated. Some of these issues are trying to find appropriate times where coalition members are free to meet; getting the members to take more of a leadership role in some of the Cancer programs initiatives; trying to find ways to keep members interested and participating over time, and motivating the members to move from an advisory role to one where they participate in the program's activities. A few interviewees mentioned that since the funding has not grown, the program has taken on a more stable role, and the coalition members do not have significant initiatives to peak their interests.

Smaller jurisdictions in particular have a difficult time with maintaining an active coalition because the people who would volunteer to participate on the coalition are usually the same people who are active in other volunteer roles. This makes scheduling and participation in meetings difficult, as well as moving the members into a more active role as they only have limited time to donate to the program. A few of the coordinators suggested that perhaps a regional coalition would be more appropriate in smaller jurisdictions with programs that are similar. A few coordinators questioned why the coalition was necessary if the functions of the coalitions could be provided through other means, such as a wellness council.

When State level Cancer Program staff were asked to discuss what factors hindered the effectiveness of local coalitions, most indicated that coalition experiences vary from county to county because there is a lack of consistency in implementation. They believe this is a result from the dependency of success on the support provided by the local health officer, the lack of internal clarity on the ongoing purpose of the coalitions, and the lack of clear guidance provided to coalitions. They added that a lack of direct supervision and thus accountability compounds these problems. State Cancer Program staff also noted that coalitions that were created from scratch have not been as successful as coalitions that were in existence prior to the CRFP. Another issue mentioned is that difficult expenditure reporting requirements create tensions between county coalition managers and coalition participants. When coalition participants do not want to deal with complex reporting requirements, county coalition managers rescind funding to these participants which leads to frustration.

4.3.5. What Changes, if any, Should be Made Regarding the Local Community Health Coalitions?

4.3.5.1. Overview

The suggested coalition changes from the local perspective include more leadership among the coalition members, greater representation of community members (who are not receiving funding) on the coalitions, and greater minority representation. From the State CRFP Cancer staff perspective, local programs should try to utilize existing coalitions and to combine coalitions from other existing projects to the extent possible. Also, local programs could enforce accountability of the coalition members by outlining planned activities for their coalitions to accomplish.

4.3.5.2. Local Program Coordinator Suggestions

A majority of the local Cancer program coordinators mentioned that they would like their coalition members to be more active and to take active leadership roles. Some noted that the representatives from the organizations that are paid attendees have full time jobs and, although they participate in meetings and an occasional workshop, they do not have the time to take a more active role. Some of the coordinators mentioned that they would like to have more members on their coalition from the community, particularly minority representatives, to increase minority participation. As some of the local programs are evolving into programs to address other cancers, they would like to have people with different perspectives. A few coordinators would like their coalition members to participate in more of the free education programs or workshops that are available to them so that they would better understand what the jurisdiction's program is trying to accomplish.

Some of the coordinators reported that they have difficulty moving their coalition members beyond a more passive role where they attend meetings and listen to what is being done. However, members do not appear to have interest in moving beyond meeting attendance to having a more active role in program implementation. One of the challenges appears to be that since the funding for the Cancer program has decreased in the past few years and the programs continue to fund the same residual services, coalition members do not see much of a challenge in participating, so do not take an active role in the program. This was mirrored by State level Program staff who indicated that the involvement of the coalitions was much greater during the start of the program but that ongoing involvement is limited in many counties. It has been difficult for some coordinators to invigorate their coalition members to be more participatory. It was suggested that establishing a system of peer mentors, pairing jurisdictions with strong coalitions with those areas where the coalition effort appears to be struggling, may be a helpful solution.

The only suggested Cancer coalition change made by local health officers was that the coalitions would benefit from having more community members who are not associated with organizations receiving funding. However, most local health officers did not have any suggested changes for the coalitions. Some of the coordinators discussed efforts to restructure their coalitions, trying to increase representation and attract a more diverse membership. These comments appear to focus around a desire to reach specific minority populations that are more specific to an individual jurisdiction. A few coordinators expressed concern that the mandatory memberships on the coalitions make it more difficult for them to gain more community advocates/representatives.

4.2.5.3. DHMH Cancer Program Staff Suggestions

State level CRF Cancer Program staff had some suggestions for changes to the local coalitions. One suggestion was for local programs to utilize existing coalitions and to combine coalitions from other existing projects to the extent possible. Local programs could also enforce accountability of the coalition members by outlining planned activities for their coalitions to accomplish. State staff could assist in the

process of improvement by encouraging reluctant counties to feel more comfortable learning from other counties that can share best practices and by finalizing the guidance for coalitions that are currently in draft form.

4.4. What Impact did Funding Levels for the Cancer Local Public Health Programs and the Statutory Limitations on Shifting Funding Among Components Have on Program Implementation and Effectiveness?

4.4.1. To what Extent Were Cancer Program Funding Levels Adequate for the Local Jurisdictions to Implement the CPEST Program?

4.4.1.1. Overview

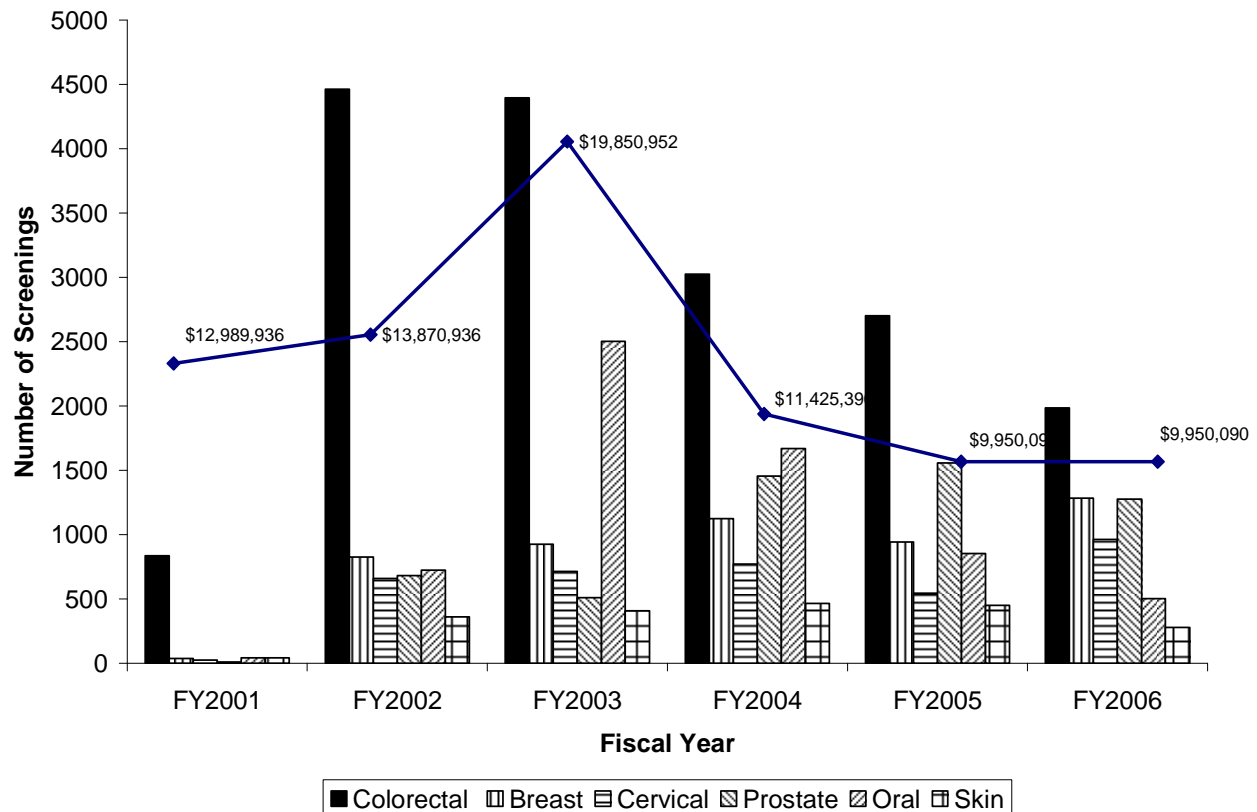
Fluctuations in funding appear to be related to fluctuations in screening provision, and to some degree, education provision by the local programs. Local Cancer program coordinators expressed mixed levels of satisfaction with funding levels, with a majority indicating that they do not receive enough funding to maintain and grow their programs. It has been particularly difficult to balance education activities that increase awareness of and interest in the program with shrinking funds allocated to screening activities. These concerns are shared by local health officers, who additionally stated that cuts in funding may contribute to a lack of sustainability of the programs in that they result in staffing cuts and in loss of interest from subvendors and providers. Programs have had to re-prioritize their programs as funds have been cut, for example, reducing or eliminating treatment as a service that they offer.

4.4.1.2. How Funding Affects Screening

As mentioned earlier in this chapter, fluctuations in screening provision, and to a lesser degree education provision, coincides with fluctuations in funding of the Cancer Program. Furthermore, as illustrated in Figure 4-8, it appears that as Local Public Health funding remains at decreased levels, screening provision continues to decline. It should be noted that local programs appear to be moving away from the less expensive FOBT screenings to enable provision of more colorectal cancer screenings.

According to the Cancer coordinators survey results, overall, local Cancer program coordinators expressed neutrality with the funding they have received for implementing their programs ($M = 2.92$). While 41.6% of local Cancer coordinators indicated that they are satisfied with their level of funding, 45.8% indicated that they are not satisfied. Responses to interview questions about funding levels were also mixed. A few coordinators indicated that their funding levels are appropriate for them to implement their programs, but a majority indicated that they do not receive enough funding. They pointed out that initially, when the programs were just getting started, funding was more available, but in recent years, it has been reduced and then remained relatively stable. As the programs began to reach people with their education programs, and people became interested in receiving screenings, funds were reduced and then not increased as the demand for services increased. Also, the screening programs began to identify people who needed intervention surgery and treatment for active Cancer, and the funds were flat. Several coordinators discussed the escalation of costs for staff, educational materials, and screenings, and the funding levels have not been raised to address these increasing costs. As a result, the number of services provided has decreased.

Figure 4-7. Number of Annual Cancer Screenings Provided and Annual Local Public Health Funding



Sources: DHMH Cancer Screening Database, November 2006;
DHMH Breast and Cervical Cancer Database, April 2006
DHMH Prepared Annual Budgets

Funding issues were the most common barriers indicated by local health officers, even when asked for their general thoughts about program barriers. Local health officers were also asked specifically about how issues with funding affect their local Cancer programs. Most local health officers echoed what the program coordinators said, indicating that shifts in funding are a hindrance to the Cancer programs in that they result in a reduction in the number of screenings that they can provide and in the amount of treatment that they can cover. Cuts in funding may also contribute to a lack of sustainability of the programs in that they result in staffing cuts and in loss of interest from subvenders and providers. A few local health officers mentioned that they would be able to do more types of screenings in their jurisdictions if they had more funding to do so, and that funding fluctuations result in reductions in outreach and education activities for their communities.

Some local program coordinators indicated that they have had to decrease other services, such as outreach and education, to be able to continue to address the need for screening services, while others spoke of the problems associated with trying to maintain a program when costs are going up, but revenues are not, and the resulting trade offs. Many of the coordinators discussed the need for treatment funding when a patient is identified with active Cancer, as the program currently does not provide these resources.

Some coordinators mentioned the difficulty of budgeting in an environment where funds are not immediately available to them at the beginning of the year or when funding fluctuates, and service demand is dynamic. They reported that when funding for screening is running low, they must reduce local education efforts, which increase the requests for screenings. Depending on the outcomes of the

screenings, particularly near the end of the fiscal year, providing the appropriate services can be challenging.

When asked specifically how funding limitations affect the local programs, many of the coordinators indicated that their programs have had to reprioritize their service array because of funding limitations. Initially, some jurisdictions were able to provide some treatment funding to active cancer patients, while providing an array of screening services, mini-grants, and outreach/education services. As the funding was reduced, jurisdictions often eliminated the mini-grants, and reduced some of the outreach services to try to establish a more balanced approach between marketing the program and providing screening services for patients who were recruited. In addition to funding reductions and stabilizations, the costs of doing screening has increased in several of the jurisdictions, making it difficult for the jurisdictions to provide the number of screening services they would like to provide.

4.4.2. To what Extent Were Cancer Program Funding Levels for the Statewide Academic Health Centers Adequate for Implementation of the Cancer Research, Other Tobacco-Related Disease Research, and Statewide Health Network?

Staff from the SAHC Grant were asked to discuss the extent to which funding levels were adequate for the implementation of their grant programs. All of the SAHC staff stated that the funding was very helpful to them but that the level of funding was inadequate. They indicated that the funding was helpful because it cultivated interest among university faculty and allowed for significant discoveries as well as encouraged physicians to provide free services to clients. However, all of the SAHC respondents mentioned that they did not receive as much funding as expected and most of the respondents specifically stated that they could accomplish more with further funds.

4.4.3. To what Extent did Funding Levels Support Necessary Infrastructure for Local Cancer Programs?

4.4.3.1. Overview

Although information collected from the local health officers from larger jurisdictions indicates that the funding levels have been sufficient for supporting necessary infrastructure of the local Cancer programs, in smaller jurisdictions, the funding that was provided in the early stages of the Cancer programs was not sufficient for them to build their staff and community networks. Furthermore, the funding has not been sufficient for programs to provide treatment services to their communities. It was suggested that allowing local programs more flexibility in how to allocate their program funds, and eliminating the requirement to return unspent funds annually could result in better use of the funds at the local level.

4.4.3.2. Funding Barriers

One of the Cancer program facilitators mentioned by some local health officers is their local staff. This indicates that, at least to some degree, the funding provided for the Cancer programs has supported building an infrastructure for the programs. However, a few local health officers indicated that the funding that was provided in the early stages of the Cancer programs was not sufficient for them to build their staff and community networks. Since the funding formula changed, this outlook has also changed, and smaller jurisdictions have been able to catch up with hiring. One thing that is still an issue according to some local health officers is the inability of programs to support treatment services once an individual receives a positive cancer screening. It was suggested that a change to the program is necessary that allows the local programs to draw resources for treatment in these cases. Similarly, some local health officers indicated that their available funds for new screenings dwindle with each abnormal screen that they encounter, and suggest that the findings should be taken into account when program budgets are set due to the re-screen requirements in those situations.

In-depth interviews with local Cancer coordinators revealed that most of the Cancer Coordinators experience challenges with the funding levels, the requirement that unexpended funds must be returned to the CRFP annually, and the lack of available funding for treatment when an active Cancer is identified. While the initial funding levels were higher, to support development and set up of the programs, once the programs were established, the funding was cut. Many of the coordinators mentioned that with the flat funding levels of the past three years, the programs have difficulty keeping up with the increased costs of maintaining the system. Without at least a cost of living increase, salaries cannot be increased without a corresponding cut in other expenses, and recruiting service providers is difficult due to low reimbursement rates.

4.4.3.3. Statutory Requirements

The legislative statute requires that any funds allocated to a component of the Cancer program in the state budget may only be expended for the purpose for which it was appropriated, and that funds may not be transferred to another component of the program. Some local Cancer program coordinators indicated that this statutory limitation results in overly-prescribed programs at the local level that are limited in their abilities to react and adjust for local needs.

The legislation requires that unspent funds from each fiscal year be returned to the CRFP fund for use to fund services in the following fiscal year. However, it is local program coordinators indicated that it is difficult for jurisdictions to budget to cover various services when demand for screenings and identification of active Cancer are so dynamic. In addition, if a jurisdiction staffs to do outreach and is successful reaching potential patients, the need for screening will increase. If too many requests for screenings are received, and the program does not limit access to control their budget, the program may have to curtail its outreach program or not be able to fill the requests for service.

A few local health officers indicated that the funding restrictions and the inflexibility for shifting funds within local programs is a barrier to implementation. It was suggested that allowing programs to manage and allocate the budgets locally could increase program effectiveness by allowing funds to shift as community and programmatic needs change. Additionally, because administering the programs requires staff, a few local health officers indicated that the administrative budget limitation was burdensome to their program implementation. It was also mentioned that sometimes difficult to determine what costs should and should not fall into the administrative budget.

4.4.3.4. Administrative Cost Limitations

When asked specifically whether the Cancer programs experience barriers due to the seven percent cap on administrative costs, many of the local program coordinators indicated that their programs have not experienced any. However, some coordinators mentioned that their programs are self-contained, with no financial assistance from the county, and the administrative cost limitation places a burden on their ability to staff appropriately. When grant funds are reduced, there is an associated reduction in administrative funding, which also may impact the ability of local programs to maintain administrative staff.

4.4.4. What Changes, if any, Should be Made with Regard to the Funding Levels and Statutory Requirements for Cancer?

4.4.4.1. Overview

Four funding changes were suggested by local program coordinators: an overall increase in funding, a shift in the annual funding formulae to account for required re-screening of individuals, the addition of a funding mechanism to support treatment of cancers identified through program screening, and a decrease in the amount of time between proposal submission and receipt of funds. Local program coordinators

would also like to have a better balance between the limitations in how funds may be used and allowing programs to tailor their activities and funding allocations to the needs of their communities.

4.4.4.2. Suggested Funding Changes

There are four funding changes that local Cancer program coordinators identified to benefit the local CRF Cancer programs. First, most coordinators would like to see overall funding increased for their programs. They suggested that they are doing fewer screenings and targeting fewer cancers than they would if more funding was available. Furthermore, an increase in funding would reduce the waiting lists that currently exist for screening services.

Second, related to a general increase in funds, programs would like for the annual funding formulae to account for the need for re-screening individuals who screen positive for cancer. As this number increases, the funds available for new screenings decrease, as the programs are obligated to re-screen positive screens on a fixed schedule. Therefore, programs that are detecting cancers or potential cancers are less able to address new screening needs in their jurisdictions.

Third, when active cancer is identified, there is currently no funding mechanism for local Cancer programs to access for provision of treatment. Some coordinators suggested that it would be very helpful if the unspent local CRFP funds could be reserved in a special statewide fund to pay for treatment services for those who have no other options. A few of the coordinators suggested that assistance from DHMH toward efforts to identify other funding sources, such as Medicaid, Medicare, and the Maryland Health Insurance Program might also help local programs to address this issue.

Finally, coordinators indicated that the timeframe for receiving funds once their grants have been submitted is too lengthy. They often have difficulty maintaining contracts with providers due to late funding distributions from the State. Furthermore, they are forced to work with a truncated schedule to complete their planned annual objectives due to the tardiness in receiving their annual funds. They suggested that perhaps streamlining the application review process, as well as reducing redundancies in the grant application requirements, may result in less lag time between submission and approval of the annual grants.

4.4.4.3. Suggested Statutory Requirements Changes

Suggestions for changes in the statutory requirements include finding a balance between the limitations in how funds may be used and allowing programs to tailor their activities and funding allocations to the needs of their communities. Also, it was suggested that relaxing the requirement that funds be returned to the program if they are not used by the end of the fiscal year would allow programs to operate better in a dynamic atmosphere with changing population needs. Alternatively, it was suggested that this same requirement be revised such that unused funds be returned to the program in the form of funding for treatment of individuals identified with cancer through program screening activities.

4.5. How well did the Statewide Academic Health Centers work?

During in-depth interviews, SAHC Grant Program staff were asked to describe highlights of the grant programs. Every SAHC staff member mentioned the ability to advance cancer treatment through the conduct of world class research as a major highlight of the grant programs. Most of the SAHC staff mentioned collaboration as a highlight of the programs (between SAHCs; within SAHCs; between SAHCs and DHMH, other state agencies, health departments, and coalitions). The meaningful, positive, and non-competitive relationship between SAHCs was noted as being of particular importance. Many of the SAHC staff mentioned the ability to leverage additional funding against the state-level CRFP funding and being able to meet the specific care needs of local Baltimore city residents, of the region, and the state

as major highlights. The fourth most commonly mentioned highlights were: the belief that the program has been well received in communities, the increase in screening, diagnosis, and treatment, and the improvement of cancer morbidity and mortality statistics. The goals and accomplishments of the SAHCs are detailed in this section.

4.5.1. To what Extent were MFR Report (Goals and Objectives) for Cancer Research Grants Achieved?

4.5.1.1. Overview

CRFP awarded research grants to the JHU and UM to promote new investigations and support ongoing cancer research. JHU set a series of goals associated with recruiting and retaining faculty in behavioral science, genetic epidemiology, cancer epidemiology, molecular genetics of cancer, and viral vaccine development. JHU reached its faculty recruitment goals for all but 2004, and only met its retention goal in 2001.

UM focused on objectives aimed at increasing research activities that translate into clinical applications and research resulting in more new clinical trials. With the exceptions of new clinical trials and patient accrual into clinical trials for 2004, UM achieved its goals on all measures and in all years. UM also set an objective to establish a biomarker/gene discovery shared facility and to expand the shared facilities in several research areas. UM achieved or exceeded all of the goals associated with this objective.

4.5.1.2. Academic Health Centers Research Grants

CRFP awarded research grants to JHU and UM to promote new investigations and support ongoing cancer research. The funds provided by these grants went toward meeting the following program-specific goal:

- To enhance cancer research and increase translation of cancer research into the clinical setting in order to reduce the burden of cancer in Maryland through the JHU's and UM Medical System's Cancer Research Grants under the Cigarette Restitution Fund

Both JHU and UM included MFR reports that track progress toward meeting their overarching goals with their annual grant applications. The information presented in this section was derived from information provided in the MFR reports.

Johns Hopkins University. Consistent with the CRFP statute, JHU set a series of goals associated with recruiting and retaining faculty with research and academic focus in the following fields: behavioral sciences, genetic epidemiology, cancer epidemiology, molecular genetics of cancer, and viral vaccine development. Recruitment was measured by the number of new faculty who were successfully recruited each year. Retention was measured by the number of grants funded by outside funding sources. As shown in Table 4-33, JHU reached its faculty recruitment goals for all but 2004, and only met its retention goal in 2001.

Table 4-32. MFR Estimates and Actual Recruitment and Retention Performance Numbers at JHU by Objective and Year

Objective	2001		2002		2003		2004	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Faculty recruited	3	6	3	5	3	4	3	2
Faculty retained	3	6	6	3	6	1	6	4

Source: Annual Grant Proposals

JHU set out to implement a competitive funding program for faculty to target specific areas of cancer research. Associated with this plan, JHU created goals for funding new research proposals, applying for and receiving new grants from outside funding sources, and publishing and presenting research findings. As indicated in Table 4-34, JHU has had success in gaining new grants and disseminating its research but, due to budget cuts, has had less success meeting estimates for funding new proposals with CRFP funds.

Table 4-33. MFR Estimates and Actual Research Performance Numbers at JHU by Objective and Year

Objective	2001		2002		2003		2004	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of research proposals funded with CRF funds	10	6	9	11	9	5	9	6
Number of new grants received from outside funding sources	NA	0	0	3	3	31	3	17
Number of peer reviewed reports in scientific literature	1	110	1	86	3	180	3	230
Number of national presentations	4	NA	6	NA	10	NA	10	NA

NA = no information was reported

Source: Annual Grant Proposals

JHU also implemented “Conquest,” a periodic report from its comprehensive cancer center. This report provides information about ongoing research, including grant awards information, research findings, the state of research funding in the Maryland, and community outcomes related to research. It is not clear what the distribution of this periodical is or how it is distributed (aside from availability on JHU’s Web site), so the reach and impact of the information cannot be assessed in this report.

University of Maryland. UM focused on objectives aimed at increasing research activities that translate into clinical applications and into more new clinical trials. As shown in Table 4-35, with the exceptions of new clinical trials and patient accrual into clinical trials for 2004, UM achieved its goals on all measures and in all years.

Table 4-34. MFR Estimates and Actual Clinical Research Performance at UM By Objective and Year

Objective	2001		2002		2003		2004	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of research activities that are translated into clinical applications	0	0	2	2	4	4	5	5
Percent increase in new clinical trials over baseline (n = 180)	20%	41%	30%	50%	40%	91%	50%	31%
Percent increase in patient accrual into clinical trials over baseline (n = 661)	10%	18%	20%	25%	30%	31%	40%	31%
Percent increase in number of faculty recruitments over baseline (n = 127)	10%	35%	20%	20%	20%	25%	25%	50%
Percent increase in peer-reviewed publications over baseline (n = 100)	No change	No change	10%	10%	20%	50%	25%	NA

NA = No information was reported

Source: Annual Grant Proposals

Associated with the objective of expanding research and clinical facilities, UM maintained the objective to establish a biomarker/gene discovery shared facility and to expand the shared facilities in several research areas. As shown in Table 4-36, UM achieved or exceeded all of the goals associated with this objective.

Table 4-35. MFR Estimates and Actual Shared Facilities Performance at UM by Objective and Year

Objective	2001		2002		2003		2004	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of fully operational shared service facilities supporting cancer investigators	7	7	7	7	7	8	8	NA
Increase in investigators that are users of the Core Shared Service Facility	10%	53%	20%	60%	30%	84%	70%	NA

NA = No information was reported
Source: Annual Grant Applications

4.5.2. To what Extent were the MFR Reports (Goals and Objectives) for Tobacco-Related Disease Grants Achieved?

4.5.2.1. Overview

CRFP awarded a grant to UM to support its research efforts in the areas of clinical and health services research of other tobacco-related diseases. The UM set a rather robust set of goals relating to both such as the numbers of health services and clinical research projects, collaborative research projects, clinical trials, post-doctoral positions, and outside funding for research projects. With but few exceptions, UM met or exceeded every one of its goals.

4.5.2.2. University Of Maryland: Other Tobacco-Related Diseases

CRFP awarded a grant to UM to support its research efforts in the areas of clinical and health services research of other tobacco-related diseases. The following goals were established for these grants:

1. Expand UM's research efforts through increased faculty recruits
2. Expand the scope of UM's clinical research efforts in targeted disease areas
3. Enhance UM's health services and clinical and translational research capability and scientific presentations in targeted disease areas
4. Expand UM's endeavors in disseminating research to engage other scientists and health researchers in the State or at national level to exchange research results for further studies and/or appropriate applications to reduce morbidity and mortality from other tobacco-related diseases.

Under the goal of expanding research through faculty recruiting for both the health services and clinical and transitional research areas, objectives included increasing the number of faculty involved in the research of other tobacco-related diseases. This goal was achieved or exceeded in all years but FY2005.

Research-specific objectives included integrating findings from health services research, creating collaborative efforts in health services research and in clinical research, and increasing health services research through support of postdoctoral trainees. In all years but FY2005, all performance goals were either achieved or exceeded, with the exception of the number of collaborative health research projects ongoing and completed and the number of postdoctoral positions filled (Table 4-36). Academic program

staff indicated that the estimate for filling postdoctoral positions was based on anticipated funding, and with a decrease in funding, the estimate could not be met.

Table 4-36. MFR Estimates and Actual Performance Numbers on Research on Other Tobacco-Related Diseases at UM for FY2005 by Performance Measure

Performance Measure	FY2002		FY2003		FY2004		FY2005	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of health services research projects initiated	6	6	2	6	2	3	3	2
Number of health services research projects ongoing and completed	6	6	8	12	10	15	18	17
Number of collaborative clinical research projects initiated	7	7	3	12	3	11	2	11
Number of collaborative clinical research projects ongoing and completed	7	7	10	19	13	30	32	41
Number of collaborative health services research projects initiated	1	2	2	2	2	2	2	1
Number of collaborative health services research projects ongoing and completed	1	1	2	3	5	5	7	6
Number of postdoctoral positions filled	0	0	1	1	2	2	2	0
Increase in the number of postdoctoral positions, compared with FY2001	0	0	1	1	2	3	5	3

Source: Annual Grant Proposals

To support the goal of expanding the scope of UM's clinical research efforts, objectives related to sponsoring clinical trials and conducting studies on clinical trials to help understand recruitment methods on the barriers to patient participation were created. Associated with these objectives, UM established performance measures for increasing the number of clinical trials and the number of research studies about clinical trials. Due to budget reductions for the OTRD grant, as shown in Table 4-38, there was no expectation for increasing the number of clinical trial applications or implementations during the period of review. Although the number of studies ongoing and completed met or exceeded the estimates for all but FY2004, and the increase in studies over FY2001 was achieved as expected.

Table 4-37. MFR Estimates and Actual Expansion of Participation in Clinical Trials at UM for FY2005 by Performance Measure

Performance Measure	FY2002		FY2003		FY2004		FY2005	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of new sponsored clinical trials applications	Objective withdrawn due to budget cuts							
Number of ongoing and completed studies on strategies	0	0	1	2	2	1	1	1
Increase in the number of studies on strategies, compared with FY2001	0	0	1	2	2	3	4	4

Source: Annual Grant Proposals

To enhance research capabilities and increase the number of scientific presentations, UM set an objective to increase the number of grants received through outside funding sources and to increase the number of faculty publications and presentations related to other tobacco-related diseases. As shown in Table 4-39, UM had success in reaching its performance goals related to these objectives.

Table 4-38. MFR Estimates and Actual Enhancement of Research Capabilities at UM for FY2005 by Performance Measure

Performance Measure	FY2002		FY2003		FY2004		FY2005	
	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
Number of CRFP funded projects applying for outside grant funding	0	0	1	2	2	3	4	10
Number of CRFP projects receiving outside grant funding	0	0	0	1	1	2	2	8
Increase in the number of outside grant funding, compared with FY2001	0	0	0	1	1	3	5	11
Increase in the number of research projects	6	6	3	15	3	14	3	13
Increase in the number of research presentations	0	6	2	2	3	2	4	8
Increase in the number of publications	0	1	2	2	3	4	6	9

Source: Annual Grant Proposals

The final overarching goal of the other tobacco-related diseases grant was to expand dissemination of research findings in this area of research. Associated with this goal, UM established an objective to conduct an annual conference to disseminate other tobacco-related diseases research results to approximately 200 scientists and health researchers and providers. One annual conference has taken place each year since 2003.

4.5.3. To what Extent were the MFR Reports (Goals and Objectives) for the Maryland Statewide Health Network Achieved?

4.5.2.1. Overview

CRFP awarded a grant to UM to support the Maryland Statewide Health Network (MSHN). UM proposed to have seven fully operational MSHN offices by FY2004 and achieved that goal. By FY2006, The MSHN had established 30 telemedicine linkages, exceeding its forecast estimate by five. The MSHN also had an objective to implement at least three best practices models, with improved results, related to the prevention of cancer and other tobacco-related diseases and had implemented two such models by FY2006. With respect to participation in new clinical trials, the MSHN indicated a 31% increase in clinical trials participation among the general population and a 32% increase among participants from diverse populations. This indicates progress, although it is short of the goals UM had set for it. Lastly, the MSHN established an objective to educate individuals in Baltimore City and counties in the Eastern Shore and Western Maryland about targeted cancers and other tobacco-related diseases. The number of activities that were promoted and conducted met or exceeded the estimates for all years. Although upwards of 10,500 were educated in each year, the number of individuals reached fell slightly — a few hundred — short of the estimates in FY2003 and FY2004.

4.5.2.2. Statewide Academic Health Network

CRFP awarded a grant to UM to support the Maryland Statewide Health Network. The overarching goal for the Maryland Statewide Health Network is as follows:

- To reduce the burden of tobacco and cancer-related diseases by conducting prevention, education, and control activities; promoting increased participation of diverse populations in clinical trials; developing best practice models; coordinating with local hospitals, health care providers, and local health departments; and expanding telemedicine linkages

To determine the extent to which goals were met, information from the MFR reports that were submitted with each year's grant application were examined. The information presented in this section is derived from the FY2003 (MFR estimate) and FY2006 MFR reports (actual).

To enable linkages to treatment and services, UM created an objective to establish a Statewide and regional infrastructure of telemedicine offices in Baltimore City, the Eastern Shore, and Western Maryland. UM proposed to have seven fully operational Maryland Statewide Health Network offices by FY2004 and achieved that goal. By FY2006, The Maryland Statewide Health Network had established 30 telemedicine linkages, exceeding the estimated number by five (Table 4-40). The Maryland Statewide Health Network also had an objective to implement at least three best practices models, with improved results, related to the prevention of cancer and other tobacco-related diseases and had implemented two such models by FY2006.

In addition to providing telemedicine linkages, the Maryland Statewide Health Network intended to increase participation in clinical trials by providing educational sessions about clinical trials participation and by focusing on educating diverse populations. Many of the performance targets for this objective were not met after FY2002. Regardless of this, in FY2005, the Maryland Statewide Health Network indicated a 31% increase in clinical trials participation among the general population and a 32% increase among participants from diverse populations.

Table 4-39. MFR Estimates and Actual Enhancement Activities Related to the Maryland Statewide Health Network's Clinical Trials by Performance Target and Fiscal Year

Performance Target	FY2002		FY2003		FY2004	
	Est.	Actual	Est.	Actual	Est.	Actual
Number of educational sessions on clinical trials	6	6	12	6	14	12
Number of individuals attending educational sessions	45	45	200	45	300	120
Number of educational sessions on clinical trials targeting diverse populations	3	3	7	7	9	10
Number of diverse individuals attending educational sessions	20	28	60	28	120	75
Number of targeted health care providers or organizations contacted with information about clinical trials	4	10	6	15	8	15
Number of targeted professionals attending educational sessions	20	78	30	78	50	45

Source: Annual Grant Applications

The Maryland Statewide Health Network established an objective to educate individuals in Baltimore City and counties in the Eastern Shore and Western Maryland about targeted cancers and other tobacco-related diseases. Performance measures associated with this objective included measures of activities and activity participation. As shown in Table 4-41, the number of activities that were promoted and conducted met or exceeded the estimates for all years. The number of individuals reached in the three regions fell slightly short of the estimates in FY2003 and FY2004.

Table 4-40. MFR Estimates and Actual Promotional and Educational Activities Related to the Maryland Statewide Health Network by Performance Target and Fiscal Year

Performance Target	FY2002		FY2003		FY2004	
	Est.	Actual	Est.	Actual	Est.	Actual
Number of programs and activities promoted through the Maryland Statewide Health Network	90	90	100	320	100	273
Number of program activities conducted targeting other tobacco-related diseases	90	90	95	320	95	271

Performance Target	FY2002		FY2003		FY2004	
	Est.	Actual	Est.	Actual	Est.	Actual
Number of individuals reached in three regions (Baltimore City and counties in the Eastern Shore and Western Maryland)	11,000	11,000	11,500	10,715	12,000	10,536

Source: Annual Grant Applications

4.5.4. To what Extent were the Goals and Objectives of the Cancer Local Public Health Grants Achieved?

4.5.4.1. Overview

As presented in section 4.1 of this report, there were goals for reducing mortality due to each of the targeted cancers through the local public health component of the CRFP, and these goals were associated with educational and screening objectives.

JHU. Between FY2001 and FY2006, a total of 46,654 attendees were present at JHU's one-on-one or group education sessions focusing on prostate cancer and JHU provided a total of 4,611 prostate cancer screening tests between FY2001 and FY2006. Its focus on minorities is evident in that 93.9% of the prostate cancer screening tests were provided to minorities.

UM. Between FY2001 and FY2006, a total of 26,275 attendees were present at UM's one-on-one or group education sessions focusing on breast and cervical cancer and UM provided 5,541 breast cancer screenings (93.9% to minority individuals) and 2,210 cervical cancer screenings (91.7% to minority individuals) between FY2001 and FY2005. Although UM provided oral cancer screenings in FY2002 through FY2004, they discontinued provision of oral screenings as of FY2005.

4.5.4.2. Johns Hopkins Medical Institutions (JHU)

JHU provided education and outreach for colorectal, breast/cervical, prostate, skin, and general cancer. They provided screening, referral, treatment, and follow-up exclusively for prostate cancer. Although there are no specific statewide MFR goals for prostate cancer education, the number of people educated through JHU's program is presented in this section.

JHU provided cancer education to a total of 55,227 individuals; 46,654 of those individuals received education about prostate cancer (see Table 4-42). Although the overall number of people receiving cancer education from JHU decreased from FY2003 through FY2005, the number of individuals receiving prostate cancer education increased during that period. The number of people educated by JHU in FY2006 decreased by greater than one-half from the prior year. Because JHU began providing cancer screening education in FY2002, the tables in this section do not contain FY2001 information.

Table 4-41. Number of People in the General Public Educated by JHU by Type of Cancer and Fiscal Year

Type of Cancer	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Colorectal	44	0	14	0	0	58
Breast/Cervical	32	389	236	3	0	660
Prostate	203	13,890	12,440	14,289	5,832	46,654
Skin	0	32	27	0	0	59
General, Other Cancers	126	3,058	3,470	584	558	7,796
Total	405	17,369	16,187	14,876	6,390	55,227

Source: DHMH Cancer Education Database, November 2007

In addition to provision of education to members of the general public, JHU provided education about prostate cancer and general and “other/multiple” cancers to a total of 726 health care professionals between FY2001 and FY2006 (Table 4-43). The number of health care providers educated about prostate cancer was the greatest in FY2003.

Table 4-42. Number of Health Care Providers Educated by JHU by Type of Cancer and Fiscal Year

Type of Cancer	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Prostate	0	407	85	67	75	634
Other/Multiple Cancers	0	10	2	50	30	92
Total	0	417	87	117	105	726

Source: DHMH Cancer Education Database, November 2007

JHU provided a total of 4,611 prostate cancer screening tests from FY2001 through FY2006. Their focus on provision of screening services to minorities is evident in that 93.9% of the prostate cancer screening tests were provided to individuals who are minorities (Table 4-44). Prostate cancer screenings increased annually from FY2001 through FY2005.

Table 4-43. Number of Prostate Cancer Screenings Provided by JHU by Type of Screening, Fiscal Year, and Population

Type of Screening	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
General Population							
DRE	2	314	230	561	635	443	2,185
PSA	2	331	251	595	670	577	2,426
Total	4	645	481	1,156	1,305	1,020	4,611
Minority Population							
DRE	0	287	221	532	587	427	2,054
PSA	0	302	242	563	617	554	2,278
Total	0	589	463	1,095	1,204	981	4,332

Source: DHMH Cancer Screening Database, November 2006

Using the statewide MFR goals as a target for JHU’s prostate cancer screening program, as shown in Table 4-45, screening goals for the State were exceeded by JHU for all years during which MFR estimates were provided, with the exception of FY2003. Similarly, statewide prostate cancer screening goals for minorities were exceeded by JHU for all years but FY2003.

Table 4-44. Statewide Prostate Cancer MFR Screening Goals and Actual Screenings Provided by JHU by Fiscal Year

Recipient Type	FY2001	FY2002	FY2003		FY2004		FY2005		FY2006	
	Actual	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
All	3*	332*	2,000	242*	292	573*	592	666*	592	562*
Minority	0	298*	1,960	227*	198	540*	532	611*	532	541*

* = Number of people screened was approximated by multiplying percentage of screenings provided by JHU by total individuals screened
Source: DHMH Cancer Screening Database, November 2006

4.5.4.3. University of Maryland Medical Center (UM)

UM provided education and outreach for breast/cervical, oral, and general cancer. They provided screening, referral, treatment, and follow-up for breast cancer and cervical cancer. Although there are no specific statewide MFR goals for breast/cervical cancer education, the number of people educated through UM’s program is presented in this section.

Between FY2002 and FY2006, UM provided cancer education to a total of 27,001 individuals. The majority of education provided targeted breast and cervical cancers (Table 4-46). The overall number of people receiving cancer education from UM increased substantially in FY2004, and has been maintained subsequently. UM reported providing education about breast and cervical cancer to 169 health care professionals during FY2003, but no other health care professional education activities were reported.

Table 4-45. Number of People in the General Public Educated by UM, by Type of Cancer and Fiscal Year

Type of Cancer	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Breast/Cervical	307	2,282	7,853	7,977	7,856	26,275
Oral	351	0	0	0	0	351
General Other/Multiple	155	220	0	0	0	375
Total	813	2,502	7,853	7,977	7,856	27,001

Source: DHMH Cancer Education Database, November 2006

UM's statewide goals and actual screening activities for FY2001 through FY2005 are provided in Table 4-47. Although the statewide goals for provision of breast cancer screenings increased from FY2004 to FY2005, the number of screenings provided through UM decreased during that time. For each year, the percentage of breast cancer screenings provided to minorities exceeded 90%, and overall 93.9% of breast cancer screenings were provided to minority individuals.

A total of 2,210 individuals received cervical cancer screenings; 91.7% were minorities. UM exceeded both the general population and minority cervical cancer screening goals set for FY2003. The number of individuals being screened for cervical cancer through UM's program decreased annually from FY2003 through FY2005.

UM provided a total of 1,455 individuals with oral cancer screenings; 77.7% of were minorities. The number of screenings provided by UM in FY2003 helped to contribute to an achievement of the overall oral cancer screening goals for the State. However, the number of screenings provided by UM decreased in FY2004, and no oral cancer screenings were performed in FY2005 or FY2006.

Table 4-46. Statewide Breast, Cervical and Oral MFR Screening Goals and Actual Screenings Provided by UM by Type of Cancer and Fiscal Year

Type of Cancer	FY2001	FY2002	FY2003		FY2004		FY2005		FY2006	
	Actual	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual
All										
Breast	71*	1,425*	500	1,344*	593	1,502*	873	1,299*	873	1,282
Cervical	26	658	500	589	—	554	—	383	—	962
Oral	0	15	1,900	836	—	618	—	1	—	0
Minority										
Breast	68*	1,298*	400	1,232	523	1,473*	664	1,228*	664	^
Cervical	23	601	400	530	—	516	—	357	—	^
Oral	0	15	1,500	796	—	337	—	0	—	0

* = Number of screenings provided, not number of individuals screened.

— = goal not set in MFR reports

^ = data unavailable

Source: DHMH Cancer Screening Database, November 2006, DHMH Breast and Cervical Cancer Screening Database, April 2006

4.5.5. What Factors Helped or Hindered the Implementation of the Cancer Research Grants, Tobacco-Related Diseases Grant, Statewide Health Network Grant, and the Local Public Health Cancer Grants in Baltimore City?

4.5.4.1. Overview

The main facilitators for these programs include having support from various people and organizations, and having program flexibility. Specifically, support from the community, DHMH, the legislature, SAHC staff, university faculty members, and those committed to cancer research is one facilitator for these programs. Flexibility of the legislation that allows the programs to spend money over an extended time period as well as the flexibility in terms of ways to implement the programs has also been helpful.

Program barriers include the length of time that it takes to get research studies started up and completed, initial mistrust from the local health departments, initially difficulty communicating with DHMH, staff turnover, and administrative tasks like completing fiscal paperwork and other reporting requirements which can be challenging.

4.5.4.2. Facilitators

SAHC Grant Program staff were asked during in-depth interviews to describe any factors that helped the implementation of the grant programs. Respondents indicated that the grant programs allowed them to nurture and support new investigators who then go on to lead large studies at major institutions. In addition, in the case of perceived duplication of efforts by local health departments, Grant Program staff said they thought that building trust with the local health departments was helpful. For example, SAHC staff said they were able to reach out to local health departments via regional offices, by utilizing staff that had good local relationships, by providing technical assistance and grant writing support on grants that were funded with no award given to the SAHC. Grant Program staff also added that community support was helpful to them in the implementation of their program.

SAHC Grant Program staff discussed a number of factors that they thought helped the administration of their programs. All of the SAHC staff said that the support they received from various players was helpful to them in the administration of their programs. SAHC staff said they received helpful support from DHMH, the legislature, the Chairman of Appropriations, SAHC staff, university faculty members, and those committed to cancer research. In addition, all of the SAHC staff said that communication was a major enabler in the administration of the grant programs. This included communication with DHMH (regarding challenges at start-up, the needed for spending timeframe extensions, technical aspects of translational research) and with the Governor and his staff (regarding program outcomes and further funding). Most of the SAHC staff were particularly thankful for the opportunity to be involved in pre-legislation communications through which they could discuss issues specific to the state of Maryland that required attention and ensure appropriate program start-up.

Most of the SAHC Grant Program staff also cited the flexibility of the legislation as an enabler to implementation. For example, staff appreciated the flexibility to spend money over an extended time period and the flexibility in terms of ways to implement the programs. A few SAHC staff cited collaboration as helpful in program implementation. They collaborated with health departments, state agencies, and DHMH. Collaboration with DHMH was particularly helpful in establishing a sound and organized infrastructure. Other enablers identified by SAHC staff including the funding itself, the ability to leverage funding against the CRFP funding, and the efforts of existing cancer organizations and coalitions.

4.5.4.3. Barriers

When asked to describe any factors that hindered the implementation of the grant programs, Grant Program staff stated that initially local health departments thought that the SAHC was duplicating their efforts. In addition, sometimes program-sponsored investigators can be slow to start up and slow to finish projects.

SAHC Grant Program staff discussed a number of factors that they thought hindered the administration of their programs. A few of the SAHC staff said that communication with DHMH was initially difficult, and that there were “standard start-up challenges” (such as building an organized infrastructure, finding the right staff, developing community connections). A few mentioned staff turnover as a challenge which they said could result in implementation differences, and required re-education and relationship building. A few said administrative tasks like completing fiscal paperwork and other reporting requirements were challenging. Other challenges mentioned by SAHC Grant Program staff included the lack of clarity of grant management guidelines, the initially established time between award and expectation of discoveries, having to reject high quality research proposals from applicants, and ensuring that legislators understand the importance of a continued commitment to CRFP efforts.

4.5.6. What Changes, if any, Should be Made Regarding the Statewide Academic Health Centers Component of the Cancer Program?

SAHC Grant Program staff were asked to discuss any changes that they thought should be made in the administration of their programs. Most of the SAHC Grant Program staff stated that they would like more interaction with DHMH. For example, they said they would like to receive continued advisory and statistical support from DHMH and to collaborate more with DHMH on research projects and grant proposals. Most of the SAHC staff also made suggestions regarding ways to ensure the long term success of the programs. These included continuing funding the programs so as not to lose momentum or jeopardize funds matched against the CRFP funds. Continue communicating with and educating legislators about the scope of the problem, the need to maintain a commitment to the current efforts, and about the amount of time it takes to see health outcomes (while concurrently promoting regular evaluation reports). Half of the SAHC staff made recommendations to expand the scope of the grants to allow for the funding of research beyond cancer, such as issues related to tobacco, research on populations with multiple chronic diseases, and/or on cancer survivors and exposures. Other suggestions for changes to the SAHC Grant Programs included funding recommendations such as providing a mechanism to allow for carryover of funds across periods of performance and providing funding for a dedicated staff person who can accelerate SAHC administrative response time. Finally, it was suggested that simplification of the grant management guidelines would benefit the program.

Chapter 5: MOTA Program Findings

5.1: To what Extent was Minority Outreach and Participation Achieved?

5.1.1. To what Extent were the Performance Measures of Minority Outreach and Participation Achieved in the MOTA Component of the CRFP?

5.1.1.1. Overview

The MOTA component of the CRFP provides outreach and technical assistance to minority communities and promotes and organizes participation of racial/ethnic minorities in tobacco and cancer coalitions. The main underlying goals of the MOTA program are to increase minority representation and participation in the local health coalitions. By increasing participation, they can work to influence the healthcare decision making processes that impact minority communities and improve the capacity of minority community-based and faith-based organizations throughout Maryland.

Performance measures. Performance targets related to coalition building, education/infrastructure building capacity, and resource development were set for the MOTA program. Overall, the goals set for coalition building were exceeded each year. The efforts of MOTA grantees to recruit representatives and attend tobacco and cancer coalition meetings increased the minority presence of all race and ethnic minority groups at local coalition meetings. MOTA grantees exceeded the overall education/infrastructure building capacity goals that were set each year, providing educational focus groups, grant writing workshops, and cultural diversity fairs in the jurisdictions in which they operate. The number of technical assistance sessions, and resulting grant awards decreased from FY2004 to FY2005, but increased in FY2006. These activities are driven by the availability of funding opportunities for minority individuals in the jurisdictions, therefore decreases may be due to the unavailability of funding opportunities in those years.

Perceived impact of the MOTA program. MOTA grantees feel that their programs have made an impact on the minority community through raising awareness about health disparities, the risks associated with using tobacco, and the importance of cancer control. State DHMH MOTA Program staff feel that an important impact of the MOTA program is in enhancing collaboration between minority organizations and local health departments, developing partnerships with local community groups, and raising awareness and encouraging behavior change.

5.1.1.1. Program Activities FY2001-FY2003

During the first three years of the program (from FY2001 to FY2003), four grantees, each representing multiple counties throughout Maryland, were selected to receive MOTA funding. Those grantees were required to provide 40% of their funding to local community-based organizations targeting African American, Asian American, Hispanic/Latino, and Native American individuals through a competitive funding process. Table 5-1 lists the grantees, the counties represented, and the funding for each for FY2001, FY2002, and FY2003.

Table 5-1. MOTA Grantee Funding Levels by Grantee, County and Fiscal Year

Grantee	County	Funding Level		
		FY2001	FY2002	FY2003
Associated Black Charities	Anne Arundel County Baltimore City Baltimore County Carroll County Howard County Harford County	\$340,000	\$340,000	\$340,000
Black Leadership Council for Excellence	Calvert County Charles County St. Mary's County	\$115,000	\$115,000	\$115,000
Maryland Center at Bowie State University	Allegany County Frederick County Garrett County Montgomery County Prince George's County Washington County	\$350,000	\$350,000	\$350,000
Times Community Services	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County	\$185,000	\$185,000	\$165,000

Source: Information provided by DHMH

5.1.1.3. Grantee Profiles FY2004-FY2006

To better serve each individual county, counties began being funded by jurisdiction in FY2004. This was done to increase ownership of the programs within the counties and to increase involvement of groups from within each community. Any county (including Baltimore City) with at least 15% minority representation in its population was eligible to receive a minimum of \$25,000 for MOTA programs. Counties with a minority population of 100,000 and over were given more funding to enable them to reach larger clusters of minorities. These counties included Baltimore, Montgomery, Prince George's and Baltimore City. During FY2004, there were 15 MOTA grantees; during FY2005, there were 14; and during FY2006, there were 15. In 2004, BLCE received a supplement to provide outreach to St. Mary's and Calvert Counties. Any grantee receiving funding greater than \$100,000 is required to use a minimum of 35% of the funding to fund local minority community-based or faith-based organizations serving minorities through a competitive funding process. A list of grantees, the counties represented, and funding levels for FY2004 and FY2006 is presented in Table 5-2. Note that in FY2006, two grantees received a \$25,000 supplement to their funding to conduct and recruit minority serving community-based organizations. With these supplements, TAA Foundation of Baltimore County provided outreach in Howard County, and Bethel AME of Kent County provided outreach in Worcester County.

Table 5-2. MOTA Grantee Funding Levels, by Grantee, County, and Fiscal Year

Organization	Jurisdiction	Funding		
		FY2004	FY2005	FY2006
Respect Foundation, Inc.	Anne Arundel County	\$25,000	\$26,666	\$25,000
Associated Black Charities	Baltimore City	\$126,185	\$126,185	\$166,000
TAA Foundation, Inc.	Baltimore County	\$55,236	\$55,236	\$80,236
Union Bethel AME Church	Caroline County	\$25,000	\$25,000	\$25,000
Black Leadership Council for Excellence	Charles County	\$55,000	\$25,000	\$25,000
Associated Black Charities	Dorchester County	\$25,000	\$25,000	\$25,000
FMH Wellness Center	Frederick County	Not funded*	\$25,000	\$25,000
Inner County Outreach	Harford County	\$25,000	\$25,000	\$25,000
Baobab Tree Project, Inc.	Howard County	\$25,000	Not funded	Not Funded
Bethel AME Church of Chestertown	Kent County	\$25,000	\$25,000	\$50,000
Washington Chiefs	Montgomery County	\$80,000	Not funded	Not Funded
Holy Cross Hospital	Montgomery County	Not funded*	\$97,185	\$97,185
Maryland Center - Bowie State University	Prince George's County	\$340,000	\$170,469	\$170,469
Community Relief Program	Somerset County	\$25,000	\$25,000	Not funded
TriLife Christian Center	Talbot County	\$25,000	\$25,000	Not funded
Scotts United Methodist Church	Talbot County	Not funded*	Not funded*	\$25,000
Brothers United Who Dare to Care	Washington County	\$18,490	Not funded	\$25,000
St. James AME Zion Church	Wicomico County	Not funded*	\$25,000	\$25,000
Save the Youth	Worcester County	\$25,000	Not funded	Not funded
Total		\$899,911	\$700,741	\$813,890

* = No funds were requested

Source: Information provided by DHMH

From the outset of the program, MOTA grantees were required to submit monthly, quarterly, and annual progress reports. Beginning in FY2004, grantees additionally were required to submit quantitative reports reflecting the extent to which their quarterly and annual program goals are being met. Due to the qualitative nature of the progress reports submitted prior to FY2004, this evaluation focuses on the quantifiable information submitted in subsequent years. However, a review of the progress reports available from FY2001, FY2002, and FY2003 indicates that MOTA grantees were engaged in activities to assess community needs through creation of community profiles. Programs worked to increase minority participation in tobacco and cancer coalitions through increasing community-based and faith-based organization presence at local tobacco and cancer coalition meetings. Additionally, MOTA programs were involved in providing workshops, technical assistance, and training focused on building partnerships and capacity development aimed at local health departments, community-based organizations, and statewide audiences.

The annual reports for the MOTA grantees and the MOTA Monthly Statistical Performance and Project Reports for FY2004 and FY2006 were examined to collect information about program and performance goals and achievements during FY2004 and FY2006. The performance measures associated with the MOTA program are illustrated in Table 5-3. Activities focused on coalition participation and recruitment were the most common types of performance measure activities reported by grantees, with almost all grantees indicating this type of activity during all three years. Many grantees participated in some type of community activity, such as health fairs, education, and screening events, and this type of participation increased over time. Grantees providing training, technical assistance and workshops increased over time showing that the programs are becoming more sophisticated as they mature. Other areas of increased activity with program maturation are in provision of capacity building and infrastructure assistance, and conducting outreach activities.

Table 5-3. MOTA Jurisdictions Reporting Specific Performance Measures by Fiscal Year

Performance Measure	FY2004	FY2005	FY2006
Attend coalition meetings	14	10	11
Recruit or identify coalition participants	11	14	12
Participate in community event (wellness, health fair, awareness)	6	6	10
Sponsor a community event	3	2	3
Participate in education/screening event	3	3	4
Provide capacity building and/or infrastructure assistance	1	5	4
Conduct training, technical assistance, workshop	8	9	11
Perform needs assessment, community profile	4	3	4
Conduct outreach (visits, phone calls, meetings)	6	4	11

Source: Information reported in MOTA Statistical Performance and Project Reports, 2004-2006

MOTA grantees are expected to conduct activities that contribute to coalition building, education/infrastructure building capacity, and resource development. Grantees provided information regarding the extent to which each of these types of activities reached targeted minority audiences, including women, African Americans, Native Americans, Asians, and Hispanic/Latinos. Grantees had an opportunity to report not only the number of people who were reached by program activities, but also the number of materials distributed during activities. The MOTA grantee generated statistical reports were examined to capture estimated and actual activities related to the broad areas of coalition building, education/infrastructure building capacity, and resource development.

5.1.1.4. Coalition Building

Most grantees reported success in recruiting individuals into coalitions during each year, and actual recruitment was almost double the overall estimate for FY2004. The overall actual recruitment fell slightly short of estimates for FY2005 and FY2006, and recruitment levels have declined each year. Five of the grantees in FY2004, six in FY2005, and eight in FY2006 did not achieve their annual estimates for recruitment. However, ten grantees in FY2004 and five in each of FY2005 and FY2006 exceeded their annual estimates. The most highly recruited minority group for all years was African Americans, followed by Hispanics/Latinos (see Table5-4). The number of African Americans and Hispanic/Latinos recruited for participation in coalitions is somewhat proportionate to their population within each jurisdiction. Although recruitment appears to be waning, the level of attendance among MOTA members is relatively stable.

All grantees reported MOTA representation by minority individuals at tobacco and cancer coalition meetings in FY2004 and FY2005, and all but one grantee reported representation in FY2006. The total number of minority individuals reported to have attended tobacco and cancer coalition meetings for each year exceeded the overall estimates for the years. Two grantees did not meet their estimates for FY2004, six grantees did not meet their estimates in FY2005, and two did not meet their estimates for 2006. It is important to note that the MOTA grantees do not control the frequency with which cancer and tobacco coalitions take place within their jurisdictions, and it is unclear whether it was a lack of meetings that hindered meeting targets, or a lack of individuals available to attend the meetings. The most highly represented minority group in attendance at tobacco and cancer coalition meetings for each year was African Americans, followed by Hispanics/Latinos. Minority representation at coalition meetings in FY2005 and FY2006 was lower than in FY2004. See Tables E-1 through E-3 in Appendix E for grantee-level details.

Table 5-4. Actual and Estimated Coalition Building Activities by Minority Group and Fiscal Year

Activity and Year	Minority Group (Actual)*					Estimated	Total Actual
	AA	NA	Asian	H/L	W		
Recruitments to tobacco and cancer coalitions, 2004	184	20	14	33	17	101	268
Recruitments to tobacco and cancer coalitions, 2005	23	8	4	13	4	64	52
Recruitments to tobacco and cancer coalitions, 2006	23	1	7	8	0	54	39
Attendees to tobacco and cancer coalition meetings, 2004	227	7	14	22	13	131	283
Attendees to tobacco and cancer coalition meetings, 2005	137	15	10	28	11	181	201
Attendees to tobacco and cancer coalition meetings, 2006	139	21	30	25	12	75	227

*AA = African-American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman
Source: MOTA Statistical Performance and Project Reports, 2004-2006

5.1.1.5. Education/Infrastructure Building Capacity

Most of the grantees held educational/focus groups during each year. During FY2004, there were a total of 165 educational/focus groups held by grantees. Only two grantees did not achieve their estimated level of performance on this measure, while ten grantees exceeded their estimates. During FY2005, a total of 117 educational/focus groups were held by grantees, reaching 2,137 attendees (see Table 5-5). While five of the programs met or exceeded their estimates for the FY2005 reporting period, eight programs did not meet their estimates and three programs that indicated estimates for this activity in FY2005 did not hold any of these types of activities, compared with only one grantee in FY2004. Overall estimates for educational focus groups were exceeded in FY2006. There were more educational focus groups ($n = 293$) held by MOTA grantees and with more attendees ($n = 6,582$) in FY2006 than in either of the prior years. However, while five grantees exceeded their estimates for FY2006, five did not, and two grantees that planned to engage in this activity did not conduct any educational/focus groups during FY2006 (see Table E-4 in Appendix E).

Table 5-5 also illustrates the number of grant writing workshops that were held by grantees each year, and the number of attendees reached by those activities. The number of grantees that set estimates for this activity declined each year, from nine in FY2004 to six in FY2005, and two in FY2006. However, the number of grantees that actually conducted grant writing workshops in FY2006 ($n = 10$) was greater than in FY2005 ($n = 6$), and FY2004 ($n = 9$). During FY2004, a total of 32 grant writing workshops were held by the MOTA grantees. Four of the nine MOTA grantees that estimated any grant writing workshops for FY2004 conducted fewer workshops than they estimated they would during the reporting period. During FY2005, the estimated and actual numbers of grant writing workshops were approximately one third of what was estimated and carried out during FY2004. Of the six grantees that estimated conducting workshops for FY2005, three did not meet their estimates. In FY2006, the two grantees that estimated conducting workshops either met or exceeded their expected performance, and eight grantees that did not estimate this activity conducted workshops. In FY2006, a total of 450 individuals attended the grant writing workshops provided by MOTA grantees. See Table E-5 in Appendix E for grantee-level details.

From FY2004 to FY2006, MOTA grantees tripled the number of cultural diversity fairs and events that they conducted and attended. The number of grantees estimating these activities increased from 53.8% in FY2004 to 100.0% in FY2006. All but one grantee that estimated conducting cultural diversity fairs or events in FY2004, all but two in FY2005, and all but one in FY2006 indicated conducting or attending these activities. In FY2004, MOTA grantees conducted or attended 57 events. In FY2005, MOTA grantees

conducted or attended 102 events, reaching 81,343 attendees. In FY2006, MOTA grantees conducted or attended 322 events, reaching 84,976 attendees. Two grantees in FY2004 and FY2005 did not meet their estimated number of events. All grantees met or exceeded their estimates in FY2006 and the overall number of events far exceeded the estimates for each year (see Table E-6 in Appendix E).

Table 5-5. Actual and Estimated Education/Infrastructure Activities, and Reach for FY2005 and FY2006

Activity	FY2004		FY2005			FY2006		
	Estimated	Actual	Estimated	Actual	Reach	Estimated	Actual	Reach
Educational focus groups	54	165	89	117	2,137	97	293	6,582
Grant writing workshops	24	32	8	11	111	3	36	450
Cultural diversity fairs	19	57	30	102	81,343	40	322	84,976

Source: MOTA Statistical Performance and Project Reports, 2004-2006

Note: No reach estimates were provided for FY2004

5.1.1.6. Resource Development

The number of training sessions provided by MOTA grantees to help organizations understand how to read RFAs and RFPs declined from 50 sessions in FY2004 to 13 sessions in FY2005, but increased to 20 in FY2006. Eleven MOTA grantees provided at least one training session in FY2004, seven of the grantees provided such sessions in FY2005, and six did so in FY2006. A total of 427 individuals attended the 33 sessions that were provided during FY2005 and FY2006. It is not clear whether the shift in provision of this type of training was due to a change in priorities from FY2004 to FY2006, because no estimated performance targets were indicated for this activity.

As shown in Table 5-6, the number of technical assistance sessions provided by MOTA grantees to assist organizations in finding and applying for grant opportunities decreased from 126 in FY2004 to 27 in FY2005, but increased to 84 in FY2006. Attendance at technical assistance sessions was lower in both FY2005 and FY2006 than in FY2004, but more attendees were reported in FY2006 than in FY2005. As with training sessions for understanding how to read RFAs or RFPs, it may be the case that a shift in priorities resulted in this decline or that fewer grant opportunities were available during FY2005 and FY2006 than in FY2004.

A total of 69 grant awards were received as a result of the TA and technical assistance provided by MOTA. There were considerably fewer grant awards resulting from attendance at technical assistance sessions provided by MOTA grantees during FY2005 compared with FY2004, and although the number of awards increased in FY2006, there were still fewer awards than in FY2004. It is not clear whether this change reflects an overall reduction in the number of grants received. Because the number of technical assistance sessions provided by MOTA grantees was reduced from FY2004 to FY2005, it is not unexpected that the number of resulting grant awards would also be reduced. See Tables E-8 through E-12 in Appendix E for grantee-level details.

Table 5-6. Number of Resource Development Activities by Minority Group and Fiscal Year

Grantee	Minority Group*					Total
	AA	NA	Asian	H/L	W	
TA sessions for applying for grants, 2004	143	22	26	50	12	126
TA sessions for applying for grants, 2005	56	4	5	7	6	27
TA sessions for applying for grants, 2006	99	7	16	8	23	84
Grant awards, 2004	41	6	4	4	3	55
Grant awards, 2005	1	0	0	0	0	1
Grant awards, 2006	8	2	0	2	1	13

*AA = African American; NA = Native American; Asian = Asian; H/L = Hispanic/Latino; W = Woman

Source: Statistical Performance and Project Reports, 2004-2006

5.1.1.7. Impact on the Community

During in-depth interviews, MOTA program coordinators were asked how their programs have impacted the minority community. The most common response was that it increases awareness and educates the community in several areas. MOTA makes people aware of the health disparities facing minorities, the risks of tobacco use and environmental tobacco smoke, the benefits of cessation, and the importance of cancer control. MOTA also brings awareness about resources available to the community and to community organizations, such as funding, technical assistance, outreach programs and events, and eligibility requirements for cancer screening. Another common response was that MOTA was an empowering force in local minority communities. Through exposure to MOTA, minorities are more comfortable and apt to ask questions about their health, for example, to their physicians. They identify their own needs, inquire about cessation programs, expand networks between their organizations, and help spread the word within their communities and families about improving health.

5.1.1.8. State CRFP MOTA Staff Perspective

MOTA Program staff were asked to describe highlights of the program. Most of the MOTA staff stated that enhanced collaboration was a major highlight of the program. This included more collaboration between MOTA grantees and local health departments, among minority coalitions, as well as among the Cancer, Tobacco, and MOTA programs. Most of the MOTA staff also said that reaching more minorities through screening, awareness raising, and behaviour change in the State was a highlight of the program that enables expansion of the visibility of the CRFP program. Other program highlights included the creation of county-level minority coalitions or minority affairs offices, and the success of small community based organizations in dealing with complex State requirements such as reporting, forms and paperwork, and budgeting.

5.1.2. What Factors Contributed to, or Hindered, Minority Outreach and Participation in the CRFP Cancer and Tobacco Programs?

5.1.2.1. Overview

MOTA grantees and State DHMH MOTA program staff had an opportunity to provide information about facilitators and barriers to minority outreach and participation in the CRFP Cancer and Tobacco programs.

Staffing, coalition participation, and logistics. MOTA grantees indicated moderate concern about their abilities to attract and maintain qualified staff and indicated that staffing issues is one barrier to implementing their programs. Additionally, they typically know when Tobacco and Cancer coalition meetings are upcoming, and they are generally satisfied with the logistics of local coalition meetings.

However, time of day and geographic location of coalition meetings has posed a barrier for some MOTA grantees.

In general, MOTA grantees are satisfied with the local program outreach efforts, inclusion of minority issues on coalition agendas, and encouragement of active participation at coalition meetings. The local coalitions facilitate their relationship with the local health departments and provide current information about cancer research. The MOTA grantees feel that they benefit the local coalitions by providing outreach and guidance, and linking local programs with experts as needed.

Facilitators. The support from and relationship with the State MOTA office is an important facilitator for the local MOTA grantees. The State DHMH MOTA staff echoed that their support and guidance is an important facilitator for the local MOTA grantees. MOTA grantees also feel that the relationship that they have with their communities and with local health departments facilitates implementation and outreach.

Barriers. The greatest barrier faced by MOTA grantees in implementing their programs is funding limitations. A second barrier is difficulty in finding minority contacts or leaders and in identifying and accessing minorities in their communities. An important barrier in providing services and outreach to the local Cancer and Tobacco programs is difficulty with scheduling meetings that work with busy schedules, which was also the most important barrier suggested by State DHMH MOTA staff

5.1.2.2. Staffing, Coalition Participation, and Logistics

Staffing issues. The majority of MOTA programs does not currently have any staff vacancies (69.2%) and has not had any in the past 12 months (61.5%). However, MOTA program coordinators expressed moderate concerns around their abilities to offer competitive fringe benefits ($M = 3.50$) and salaries ($M = 3.36$) to potential employees. While a majority indicated that they do not have difficulty hiring qualified staff (58.3%) the pool of job candidates from which they can draw is seen as being somewhat limited ($M = 3.00$, $SD = 1.21$), and there was a significant positive relationship between these two variables, $r(12) = .818$, $p < .01$.

Coalition activity and outreach. Approximately one half of the coalitions to which the MOTA coordinators belong are separate Tobacco and Cancer coalitions (46.2%). All of the coalitions meet at least four times per year (100%).

From MOTA members' perspectives, local programs do a good job of reminding coalition members of upcoming meetings. In fact, all MOTA coordinators indicated that they are reminded of upcoming Tobacco, Cancer or combined coalition meetings in some way, and the ways in which Cancer, Tobacco, and combined meeting reminders are provided is somewhat similar across coalition types. The most common way in which MOTA coordinators learn about Tobacco, Cancer or combined coalition meetings is through email messages (83.3% – 85.7%). One-half or more of MOTA grantees are reminded about Tobacco (50.0%) or combined (57.1%) meetings through announcements at meetings, while one-third (33.3%) of the Cancer coalition reminders come via this route. Reminders through the mail are more likely for combined coalition meetings (42.9%) than for Tobacco (16.7%) or Cancer (33.3%). Public postings or billboards are not used to remind MOTA grantees about combined meetings, but are used to remind them about Tobacco and Cancer meetings one-third of the time (33.3%). Word of mouth is not an often used method for reminding MOTA grantees about upcoming meetings, and reminders are not made via local media or other venues (see Table 5-7).

Table 5-7. Sources of Meeting Reminders for Tobacco, Cancer, and Combined Coalition Meetings

Source of meeting reminders	Tobacco (N = 6)	Cancer (N = 6)	Combined (N = 7)	Total (N=19)
Email/Internet	83.3%	83.3%	85.7%	84.2%
Reminded at meetings	50.0%	33.3%	57.1%	47.4%
Mailing	16.7%	33.3%	42.9%	31.6%
Public Posting/Bulletin Board	33.3%	33.3%	0.0%	21.1%
Word of Mouth	16.7%	16.7%	14.3%	15.8%
Local Media	0.0%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%

Source: MOTA Grantee Survey

In general, MOTA coordinators expressed satisfaction with the logistics of local coalition meetings. Some the issues probed can directly affect the extent to which coalition members are active on their coalitions. Two of these factors, time of day and geographic location of the meetings, were rated as unsatisfactory by some MOTA respondents. The time of day for coalition meetings had the lowest satisfaction rating overall ($M = 3.37$), and more than one-quarter of respondents indicated that they are dissatisfied (26.3%) or very dissatisfied (5.3%) with the time of day that their coalition meetings are held. The overall satisfaction rating for the geographic location of coalition meetings ($M = 3.84$) was better than that for the time at which meetings are held, but a few individuals on the Tobacco (16.7%) and Cancer coalitions (16.7%), and more on the combined coalitions (28.6%) expressed dissatisfaction with this factor, which could indicate a barrier to participation.

Overall, MOTA grantees expressed satisfaction with local program outreach efforts, inclusion of minority issues on coalition agendas, and the encouragement of active participation at coalition meetings. The satisfaction ratings for efforts that local Tobacco ($M = 4.20$) and Cancer ($M = 4.33$) programs are making to conduct minority outreach is quite high, but is lower for combined coalitions ($M = 3.43$). Indeed, a greater percent of respondents representing combined coalitions (28.6%) indicated dissatisfaction with outreach efforts relative to those on separate Tobacco (20.2%) and Cancer (16.7%) coalitions. Although satisfaction with encouragement of active participation from Tobacco coalition chairs ($M = 4.50$) was higher than with Cancer ($M = 4.33$) and combined ($M = 3.86$) coalition chairs, satisfaction with inclusion of minority health issues on coalition agendas was highest for Cancer coalitions. In fact, all respondents (100%) indicated that they are satisfied with this aspect of the Cancer coalition meetings.

In qualitative interviews, MOTA coordinators were asked to describe their experience working with the Tobacco and Cancer coalitions. Most commonly, respondents said that the coalitions provided a tangible benefit to them, for example, facilitating their relationship with the local health department, providing information about recent developments in cancer research and prevention, supplying grants, resources and information, ideas for outreach, and links to screening, diagnosis, and treatment. The next most common response was that MOTA organizations offered a tangible benefit to the coalition. Respondents mentioned that they make themselves available to help the coalition with the RFP process, outreach, to sit on subcommittees, to help develop the content of coalition meetings, to bring experts to the coalition, and to coordinate trainings. A few respondents mentioned a limited or difficult relationship with the coalition in the past or present. They mentioned feeling misunderstood, uninformed, misdirected, or unwelcome at coalition meetings. Overall, respondents believed that their presence at the meetings brought minority issues to the forefront and helped to influence decision-makers. Most respondents reported that two to four MOTA representatives are present at coalition meetings. Some reported that five or more are present.

Minority input and program planning. A majority of survey respondents agreed that minority coalition members provide input into developing annual Tobacco (69.3%) and Cancer (69.2%) plans, and that local Tobacco (69.3%) and Cancer (69.3%) plans accurately describe minority health needs within their jurisdictions. However, the mean agreement rating for these variables tended toward neutral because

between 7.7% and 23.1% of respondents disagreed that program planning at the local levels take minority input and issues into account. However, given that programs appear to be successful in reaching racial and ethnic minorities through their program activities, it is not clear whether the perceived lack of input and consideration has any practical significance in program outcomes.

During in-depth interviews, MOTA coordinators were asked, “once minority individuals are recruited into the coalition, how do you prepare them to be active members?” Most frequently, they said they encourage minorities to give input at the coalition meetings, reminding them that meetings are a venue where their voice can be heard and where they have a chance to represent their community. The next most common response was that they provide trainings, technical assistance, or workshops in areas such as grant writing, networking, and advocacy. A few respondents reported holding one-on-one meetings or simply communicating meeting times and agendas to minority individuals. Other responses included holding annual preparatory and follow-up meetings about coalition membership, giving members specific roles or tasks, such as attending legislative hearings in Annapolis, reminding minorities that membership will help expand their organization’s reach, helping them to set up outreach teams using the MOTA model, and personally offering transportation to meetings.

5.1.2.3. Facilitators

Program implementation facilitators. It appears that culturally appropriate materials for conducting outreach for tobacco and cancer programs are available to MOTA grantees. Most MOTA grantees indicated that they are satisfied with the materials that are available for conducting outreach (84.6%). Furthermore, more than three-quarters of respondents indicated satisfaction with the availability of local tobacco data (77.0%) and local cancer data (84.6%); and a greater proportion indicated satisfaction with the availability of State level tobacco and cancer data (92.3%). Importantly, almost all of the respondents indicated satisfaction with the utility of the tobacco and cancer data disseminated by DHMH (92.3%).

Survey respondents were asked to provide the top three facilitators to implementing their programs. All 13 respondents were able to provide at least one facilitator for MOTA program implementation, and most were able to provide two or three facilitators. As shown in Table 5-8, the most common facilitator mentioned was the support that programs receive from the State CRFP and MOTA staff. Support from the community and from local health departments were also seen as important facilitators for many of the respondents. The capabilities and knowledge of subvendors and MOTA program staff were noted as facilitators by some respondents. A few respondents indicated that the availability of resources such as data and examples of successes and failures, the available funding, and the flexibility in program implementation helps them to implement their programs.

Table 5-8. Facilitators for Implementing MOTA Programs

Facilitator	Most Important	Second Most Important	Third Most Important	Total Mentions
Support from State CRF/MOTA staff	4	1	3	8
Support from the community	2	3	2	7
Support from local health departments	2	4	0	6
Capable and knowledgeable subvendors	2	1	1	4
Capable and knowledgeable staff	1	1	2	4
Availability of resources	0	1	1	2
Funding	1	1	0	2
Flexibility in program implementation	1	0	0	1
Total	13	12	9	34

Source: MOTA Grantee Survey

Relationship with CRF MOTA Office. In face-to-face interviews, when asked “what factors help you to implement the MOTA program?”, one of the most common responses mentioned by MOTA program coordinators was their relationship with the Central CRF MOTA office. They expressed appreciation for the guidance, assistance, and expertise provided by the State staff. They described the staff as accessible, approachable, and responsive to their questions. A few of these respondents specified that the orientations and trainings provided by the State are beneficial. One vendor stated that such meetings are helpful because they provide a forum to learn from and network with their MOTA counterparts in other jurisdictions.

Relationship with the community. Among their most common responses, interview respondents also mentioned support from or relationships with the community as an important factor in helping to implement their program goals. “Community” may refer to community- or faith-based organizations, MOTA subgrantees, or individual community members. Several mentioned that due to their staff members’ already-existing relationships or reputation within the community, it has been responsive to and cooperative with their program efforts. Other enablers mentioned pertaining to support from the community include: MOTA access to culturally relevant health promotion groups and the passion or good-hearted commitment of community organizations.

Other facilitators. A few respondents indicated that the time commitment, skills, or experience of their staff facilitated program implementation, as well as collaboration with or cooperation from the local health department. All coordinators were asked to describe their experience working with the local health department staff. Several of them described a positive relationship with the local health departments, mentioning reciprocity and partnership in outreach efforts and creation of local plans, the provision of resources and trainings, and regular communication from the department about relevant information, such as funding opportunities and recent developments at the state level.

State DHMH MOTA Staff Perspective. State DHMH MOTA Program staff were asked to discuss any factors that contributed to minority outreach and participation in the CRF Tobacco and Cancer programs. All MOTA staff said that they thought that the guidance that they provided to MOTA grantees enabled minority outreach efforts. Guidance provided included:

- Ways that MOTA grantees can improve their relationships with and get more involved in coalitions (by attending coalition meetings and advocating for different meeting times, and/or by identifying at least one representative who can attend the meeting and report back to the group)
- Ways that MOTA grantees can improve their relationships with local coordinators (by encouraging communication, and sharing information on meeting times)
- Ways to increase minority participation in coalitions (by allowing parents enough time to go home and make dinner for their families then attend events; by providing ways for parents to bring their children with them – providing games or allowing youth to earn community service hours for involvement)
- General technical assistance to MOTA grantees through trainings and distribution of lists of community based organizations, funding opportunities, and free information for immigrant populations
- Alternative ways of dealing with budget cuts (by having a local representative attend events versus having a representative spend funds for travel)
- Fostering a trusted relationship that involves guidance and complimentary advice as opposed to monitoring and oversight

Most of the MOTA staff added that they also provided guidance to coalitions on ways to improve their relationships with MOTA grantees, and to local coordinators on ways to participate in MOTA events, such as by encouraging clinicians to present content information or lists of providers in the community, or by using the MOTA events as a means for communicating health information outside of cancer and tobacco to the community. Most of the MOTA staff also said that having data on grantee activities has been helpful for determining strengths and weaknesses, and using that information to resolve challenges. In addition, most of the MOTA staff said they think relationships between MOTA grantees and local health officers have improved over time and that local health officers feel more comfortable seeking guidance from their MOTA grantees.

MOTA program staff also identified characteristics of successful minority outreach efforts. These included programs that are passionate about servicing minorities, even if they have a small percentage of minorities in their county, as opposed to programs that feel obligated to do so; programs that use existing activities and events for minorities as a means to disseminate CRFP information; and programs that target and include a variety of ethnicities to ensure broad reach and prevent a conception of exclusion

5.1.2.4. Barriers

Program implementation barriers. Eleven of the 13 survey respondents provided at least one barrier to implementing program implementation, but only six respondents provided two or three barriers. Table 5-9 shows that the most commonly stated barrier to MOTA program implementation was the difficulty in the scheduling of coalition meetings, community meetings, and required trainings. Difficulties in locating minority contacts or minority leaders and difficulties in accessing minorities in the community were also mentioned by many of the respondents that provided barriers. Other barriers listed included lack of community support, lack of current data, lack of capable subvendors, inadequate information available regarding screening requirement for colorectal cancer, lack of encouragement for MOTA programs to provide needed trainings in the communities, language barriers, and the inability for local programs to offer support to individuals who do not have transportation to obtain services.

Table 5-9. Barriers to Implementing MOTA Programs

Facilitator	Most Important	Second Most Important	Third Most Important	Total Mentions
Difficulty with scheduling of meetings and trainings	3	1	2	6
Difficulty finding minority contacts or leaders	2	3	0	5
Difficulty locating/accessing minorities in community	3	0	1	4
Lack of community support	2	0	0	2
Lack of current data	1	0	0	1
Lack of capable subvendors	0	1	0	1
Inadequate information about screening eligibility requirements	0	1	0	1
Lack of encouragement to provide needed trainings	0	0	1	1
Language barriers	0	0	1	1
Inability to offer support to individuals without transportation	0	0	1	1
Total	11	6	6	23

Source: MOTA Grantee Survey

In face-to-face interviews, MOTA program coordinators were asked about general program barriers. If respondents did not initially mention the following items in their response, they were probed as to whether these, too, had also been challenges: the availability of local data, statutory requirements, program requirements, or limited funding.

Funding limitations. Mentions of funding limitations (both unprobed and probed) were the most commonly stated barrier to program implementation. Some of the respondents indicated on their own initiative that funding limitations were a barrier in the implementation of the program. They specifically mentioned the lack of staff to perform the volume of work, inability to offer fringe benefits to employees, delays in the receipt of funding, inadequate funds for purchasing necessary goods and services, the need for unrestricted funds or flexibility in line items, and the need to use personal or organizational funds to supplement MOTA's operations. Several respondents did not initially mention funding as a challenge, but when probed about whether funding or program requirements posed obstacles, they affirmed that funding limitations had indeed been prohibitive. These respondents mentioned lack of funds for hiring and retaining qualified personnel, inability to offer fringe benefits, inadequate funds for desired equipment or to execute new ideas, the inability to budget for indirect program costs, funds expiring early due to mid-year requests for deliverables, and out-of-pocket expenses for the organization or individuals.

Difficulty identifying and accessing minorities. Most interview respondents indicated that identifying and accessing minority communities has, either currently or in the past, been a barrier to program implementation. In general, respondents attributed this to minority disinterest in collaborating with MOTA, lack of formal ethnic community organizations, or the desire to maintain anonymity. The minority group most often mentioned was the Native American population. According to respondents, difficulties in reaching this group may be due to misrepresentation of identity in population data or due to Native American belief in the sacredness of tobacco. The next most frequently mentioned group was the Asian population. Respondents perceive language barriers or poor strategy on their part to be at the source of their difficulties in reaching this group. The least mentioned group was the Hispanic or Latino population. Respondents perceive the barrier in reaching the Hispanic population to be due to small population size, an unreceptive political climate, or distrust from those among them who fear disclosure of immigration status.

Program requirements. Several interview respondents, either on their own initiative or after being asked specifically, indicated program requirements to be barriers. Of these, the most common unprobed response was frustration with the amount of paperwork and required documentation, which were described as "excessive" and "daunting." Other unprobed responses included difficulty finding minority organizations that meet legitimacy requirements set by the local health department, and dissatisfaction with the duration of meetings to discuss program requirements. A few respondents, after being probed about whether program requirements had presented obstacles, mentioned that paperwork requirements distract from outreach efforts, local health department's RFP windows aren't long enough to provide thorough technical assistance to applicant organizations, and that eligibility requirements for cancer screenings are unclear.

Scheduling of meetings. Some of the respondents reported difficulty with the scheduling of coalition meetings or required trainings. These include the inability to establish satisfactory times, locations, and frequencies of meetings or trainings. The reliance on volunteer hours for coalition activism and the high mobility of target populations were mentioned as barriers in this regard.

Other Barriers. A few respondents reported strained relationships with minority community leaders, or the need to establish connections with such leaders, and a lack of transportation in the minority communities. When probed whether the availability of local data was a challenge, a small number of respondents mentioned that they would like to receive more local data from DHMH and expressed doubts about the reliability of census data for identifying smaller minority populations. When coordinators were asked to describe their relationship with local health department staff, several mentioned that the relationship has been tense in the past due to broken trust, lack of organization, or misunderstanding of MOTA's role. However, most of these respondents reported seeing marked improvement in these relationships over the years, while a few report the need for improvement.

State DHMH MOTA staff perspective. State DHMH MOTA Program staff were asked to discuss any factors that hindered minority outreach and participation in the CRFP Tobacco Program. All MOTA staff stated that barriers to minority outreach involved the convention of coalition meetings or minority outreach events that are inconvenient for either minorities or the MOTA grantee. For example, they explained that meetings are held at inconvenient times, such as times that do not allow parents to go home after work to prepare meals for their families; or locations; or are otherwise unaccommodating (by not providing ways for parents to bring their children with them to meetings by providing games or community service hours to youth for participation). Most of the MOTA staff commented on the relationship between MOTA grantees and local health officers. For example, some MOTA grantees work well with the local health officers while others do not. In some counties, local health officers felt that the MOTA grantee was not including them in minority outreach activities.

Other barriers to minority outreach included coalition factors, such as the decrease in involvement by coalitions when they realized they would not receive funding and a lack of passionate participation by coalition members who are paid and/or hired to participate. It was also mentioned that there is a lack of legislative clarity on what constitutes good coalition performance.

5.1.3. What Changes, if any, Should be Made Regarding Minority Outreach and Participation in the CRFP Cancer and Tobacco Programs?

5.1.3.1. Overview

MOTA program coordinators, local Tobacco and Cancer program coordinators and local health officers, and State DHMH MOTA staff were asked to provide suggestions for changes to minority outreach and participation.

MOTA coordinator suggestions. MOTA program coordinators suggested that they might increase participation in training events more convenient training schedules were provided. To enhance their programs, they suggested more frequent networking opportunities among MOTA programs, such as monthly conference calls. To increase coalition participation, they suggested making meeting times more accommodating to minorities' schedules, and providing greater lead time when announcing coalition meetings.

Local Tobacco and Cancer program suggestions. The main suggestion made by the local programs was for better communication with and understanding of the MOTA program so that they have a better understanding of the intended function of the MOTA programs in their jurisdictions.

State DHMH MOTA staff suggestions. The main suggestions for improving minority outreach and participation involved bringing culturally competent, local speakers who are invested in the community to offer strategies for outreach. It was suggested that coalition participation could be enhanced through recognition and acknowledgement of the contributions that are being made by the participants.

5.1.3.2. MOTA Coordinators' Perspective

MOTA program coordinators offered a variety of ideas when asked "do you have suggestions for changes to the MOTA program?" Most commonly, strategies were suggested for better reaching minority populations. Respondents expressed the need for more "community-friendly" training times for MOTA organizations, for example, on Saturdays or evenings. Outreach programs to minority communities should be conducted within the geographical area of the targeted communities in order to reduce the transportation barrier. Flexibility is needed in the definition of "Native American," which has been too narrow. For the purposes of targeting this population, Native Americans of mixed heritage should also be considered.

The next most frequently stated suggestions were those regarding the need for more networking opportunities. MOTA vendors expressed a desire to see more formalized and regularly scheduled opportunities to learn from each other. For example, monthly or quarterly MOTA conference calls would be beneficial for brainstorming strategies, discussing each others' performance, successes, and barriers, and to welcome and assist new grantees. In addition, exposure to and collaboration with non-MOTA outreach programs, health initiatives, and technical assistance would garner new ideas and opportunities to learn from successful programs.

Other common suggestions for changes include reduction in required paperwork and documentation, for example, the program should require either quarterly or annual reports, but not both. MOTA should be extended to include other health issues that affect minorities. Since tobacco use doesn't exist in isolation, but shares risk factors with other health problems, a broader community health approach that addresses poor nutrition, violence, and diabetes, for example, could potentially also influence tobacco use outcomes.

Other suggestions included holding a meeting between local health departments, MOTA grantees, and the State central office to discuss general expectations and strategies for coalition building; allowing non-monetary incentives to inspire community participation and membership in coalitions; and providing funds for follow-up after cancer screenings.

When MOTA coordinators were asked to offer suggestions for changes to the way the local health department manages the CRF Program, the most common response was that coalition meeting times should be changed to better accommodate minorities' schedules and notice given with more lead time. Another common response was that MOTA should be given more opportunity for input in funding decisions for minority organizations. Other responses included the need for better case management and more depth of expertise among health department staff.

5.1.3.3. Tobacco and Cancer Program Perspective

Tobacco and Cancer program coordinators and local health officers were asked during in-depth interviews to identify any changes they think should be made to the MOTA program. Those that have a good understanding of, and relationship with, their MOTA programs indicated that MOTA is an important part of their outreach to minority communities. However, the main thing that coordinators indicated would be helpful for them in improving minority outreach and participation for their programs is better communication with and understanding of the MOTA program. Because some coordinators are unsure of what the function of MOTA should be in their communities, they are also unsure of how best to work with them and coordinate with them to increase minority outreach. They are also unclear on the role that the MOTA grantees are expected to fill in their jurisdictions, based on State level expectations. They expressed some concern that the MOTA grantees may not be encouraged establish consistent and appropriate communication channels with the local Tobacco and Cancer programs to allow a better understanding, from all perspectives, of how the programs can work together toward a common goal.

It appears that misunderstanding of the programs, and miscommunication about the purposes and goals of the program are the root of many of the issues that local program coordinators identified. Moderated discussions with the local Tobacco and Cancer programs and the MOTA vendors in their jurisdictions may help the programs to work more cohesively. Additionally, providing the local program coordinators with the annual MOTA goals, as they relate to the local Tobacco and Cancer programs, may help the local programs to optimize their utilization of the services MOTA has to offer, while identifying gaps in minority outreach that should be filled through other means or mechanisms.

5.1.3.4. State CRFP MOTA Staff Perspective

MOTA staff provided several suggestions for ways to improve minority outreach and participation in the CRFP Tobacco Programs. Most of the MOTA staff suggested ways to improve the effectiveness of minority outreach. Ways to do so included bringing in speakers who are: culturally competent (in sensitivity, language, and appearance), invested in the community, are local and have investment in the community as part of their everyday job. MOTA staff added that it is important to communicate with these speakers and respect their competing time commitments. Several suggestions were made on how to improve minority participation in coalitions. These included recognizing and acknowledging the contributions of coalition members, having those recognized serve as resources to other members, putting the expectations of coalition members in writing, and present them to potential coalition prior to recruiting them into the coalition.

Other suggestions for improving minority outreach and participation included provision of training, guidance, and infrastructure for the local program. For example, providing trainings on how to do outreach and how to understand cultural diversities, and evaluating gaps in learning through previous trainings and provide comprehensive seminars/trainings to fill those gaps. It also suggested that promoting statewide networks for minorities as a means of support and solidarity regardless of the county they reside in would assist outreach by allowing better networking and support.

Chapter 6: Overall Program Administration Findings

6.1: How well did the Administration of the Program Work (State and Local)?

6.1.1. To what Extent was an Infrastructure for the Management of the Program Adequate?

Most of the State DHMH Tobacco Program staff explicitly stated that aside from staff issues, the infrastructure for the management of the program was adequate. Specific infrastructural challenges cited included dealing with a hiring freeze, barriers to recruitment, and having to have staff carry multiple positions for many months. Enablers cited included support from DHMH, the ability to hire new staff, help with the procurement process, and support from FHA in particular.

All of the Cancer Program staff explicitly stated that the infrastructure for the management of the program was adequate. Infrastructural challenges cited included hiring PINS. Enablers cited included support from DHMH, awareness of the program as a high priority program, good people, sufficient funding, and information technology support.

Most of the MOTA Program staff explicitly stated that the infrastructure for the management of the program is inadequate. There is no staff dedicated to provide adequate training, support and technical guidance to grantees. Infrastructure cited included lack of time, insufficient training of grantees and lack of dedicated staff (i.e. full-time grants manager). Enablers cited included support from and listening skills of DHMH, and having access to sufficient resources (information, staff, equipment, funding).

6.1.2. To what Extent did the Department Provide Oversight, Training, and Technical Assistance of the Local Tobacco and Cancer Programs? Were the Statutory Requirements Met?

6.1.2.1. Overview

To determine if the Tobacco and Cancer components of the CRFP provide oversight, training, and technical assistance to grantees, several data sources, including grant application instructions and review criteria, site visit procedures and reports, and program records. Additional materials reviewed for the cancer component included technical assistance memos and monthly teleconference agendas. Additionally, questions were included on the Tobacco, Cancer and MOTA program coordinator surveys and in-depth interviews to determine their satisfaction with the resources they receive from DHMH and their utility in planning and implementation of the local programs.

Local Tobacco program perspective. While local Tobacco program coordinators find the regional trainings to be useful, they would like to have more opportunities for networking with other local programs, such as monthly conference calls and/or email listserves. Local program coordinators feel they would benefit from training in the areas of political advocacy, cessation provision, and reaching hard-to-reach populations. In general, local programs are satisfied with the ability of the State DHMH Tobacco Program staff to answer questions that they ask when faced with program barriers, but lack of staff resources and staff turnover at DHMH may be a limitation.

Local Cancer program perspective. Most local Cancer program coordinators find the oversight from and communication with DHMH to be a program facilitator. The training and technical assistance provided, particularly around use of the databases has been well received, as have support for overcoming program barriers and site visit recommendations. Local programs would like to have minimal clinical elements developed for programs addressing cancers other than colorectal cancer.

MOTA grantee perspective. MOTA grantees feel that they are getting good oversight and guidance from DHMH and are satisfied with the training and support that DHMH provides. They find the most useful training and technical assistance to be around strategies for effective outreach and communication with minority groups. An area where some would like to receive more guidance is in building and sustaining relationships with the community.

6.1.2.2. Tobacco Program

Satisfaction with Current Training and Oversight. During in-depth interviews of the Tobacco program coordinators, almost all indicated that they find the regional meetings to be useful, particularly because they allow programs to interact with one another and find out what is working in other jurisdictions. Many coordinators would like to have more regional meetings or more opportunities to interact with other programs. Some coordinators reported that they have received training or TA through DHMH or they have received information about where they can go to receive needed training or assistance from DHMH staff and have used CRFP funding to attend trainings. However, most coordinators would like to receive more training and technical assistance in areas such as political advocacy, provision of cessation services, and how to reach hard-to-reach populations. Additionally, a few coordinators suggested that technical assistance to help programs to understand the key indicators and performance measures would be helpful.

According to the Tobacco coordinators surveys, Tobacco program coordinators may require more support than they currently receive from DHMH to plan and implement their programs. Approximately one-half of Tobacco program coordinators expressed satisfaction with the technical assistance provided by DHMH (56.5%; $M = 3.43$), the availability of DHMH staff when needed (56.5%; $M = 3.52$), and the ability of DHMH staff to answer questions (52.1%; $M = 3.39$). More than one-quarter of the respondents indicated dissatisfaction with these elements of support from DHMH. Importantly, less than one-half of respondents indicated that they are satisfied with the support provided by DHMH for program planning (43.4%; $M = 3.26$), and with the trainings provided by DHMH (34.8%; $M = 3.09$). However, during in-depth interviews, some coordinators indicated that they have received referrals from the State program staff that assisted in finding resources for needed training or assistance, and that program funds may be used for such ventures.

Tobacco programs may require greater clarity in the instructions they receive for writing annual proposals and documenting program activities. While greater than one-half of respondents indicated that they are satisfied with the clarity of instructions they receive for writing annual proposals (56.5%; $M = 3.22$), fewer than one-half indicated satisfaction with the clarity of instructions they receive for documenting program activities (43.4%; $M = 2.96$). Moreover, an almost equal proportion of individuals indicated that they are satisfied with their abilities to consistently report program activities using the available instructions (39.1%) as indicated that they are dissatisfied with the same (34.7%; $M = 3.04$). While 39.1% of respondents indicated that they are satisfied with the format for reporting their local program activities, 48.8% indicated that they are dissatisfied ($M = 2.87$). Respondents also indicated neutrality for the amount of paperwork required for reporting program activities ($M = 2.91$), with almost one-half of respondents indicating satisfaction (47.8%).

While most coordinators indicated during the in-depth interviews that the level of guidance they receive from DHMH is appropriate, many feel that they only receive comments from DHMH staff when they have done something wrong. Furthermore, they indicated that the comments they receive are critical, but typically do not offer suggestions for improvement that help guide them in rectifying the problems. It was suggested that receiving guidance from DHMH regarding science or evidence-based practices would be helpful in improving the local programs.

Overcoming Barriers. Tobacco program coordinators were asked whether they have received support from DHMH to overcome the barriers that they have encountered. Many coordinators have asked for help

from DHMH, and indicated that their questions were answered, or they were directed to resources that helped them to overcome the barriers. Many have found solutions for their barriers by networking with other programs at the regional meetings, or from information presented at the regional meetings.

Some coordinators, however, feel that they have not been able to obtain satisfactory assistance from DHMH when they have encountered hindrances to their programs. These individuals point to a few issues that may result in a lack of guidance or assistance from DHMH, including: lack of staff resources at DHMH; staff turnover at DHMH, resulting in inconsistencies in requirements and expectations; a critical focus in feedback, rather than on offering constructive suggestions for improvement.

Coordinators were asked what other guidance they would like to receive from DHMH, and the two most common responses were that they would like to have a way to be more in touch with other programs, and they would like to receive more training or TA. Suggestions for better communication with other programs included providing a list-serve through which programs can communicate with one another; having regular teleconferences; creating an intranet Website on which programs can post information about their activities, the resources they are using to implement their programs, and outcomes information; and implementing an annual statewide meeting. Providing a way for coordinators to network with one another may reduce the burden of already over-extended DHMH staff to assist with programmatic efforts.

Coordinators indicated that they would benefit from receiving training or technical assistance for a number of subjects. Specifically, some coordinators would like assistance in contracts and budget management to help with their subvendor processes. It was suggested that training in program implementation that includes recommendations and information about science-based practices and best practices would help to enhance the local programs. Finally, some coordinators feel they would benefit from technical assistance for the grant writing process before and during the proposal period.

Site Visits. A review of the annual reports and feedback forms indicated that the Tobacco Program provides oversight and trainings to health departments. The most site visits were conducted in 2005, during which site visits were made to nine counties. Table 6-1 illustrates the issues that were identified during the site visits. Recommendations for resolution were made for these issues.

Table 6-1.Type and Number of Recommendations Made About the Tobacco Program

Type of Recommendation	Number
Program staff	3
Coalition	9
Community element	7
School element	11
Enforcement element	4
Cessation element	7
Minority outreach element	8
Fiscal systems	4
Local program subvendors	13
Other	3

Source: Site visit reports 2001-2005

6.1.2.3. Cancer Program

Satisfaction with Current Training and Oversight. When asked to discuss general facilitators for implementing their Cancer programs, many coordinators spontaneously mentioned that the support that they get from the DHMH staff is an important facilitator. When asked specifically about the oversight,

guidance, training and technical assistance provided by State CRFP staff, most of the Cancer coordinators indicated that they receive sufficient support through monthly teleconferences, regional meetings, and technical assistance. They also indicated that the State CRFP staff is very accessible and responsive to impromptu requests for assistance.

Many coordinators also discussed the utility of the training and technical assistance provided by DHMH staff on the client databases. The coordinators appreciated that trainings were provided on-site, as it gave staff an opportunity to use their own equipment and also reduced the time and expense of transporting staff to a central site for the training.

The Health Officer memos received mixed mention. While some of the coordinators found the memos to be helpful in providing guidance, others indicated that there are too many of the memos, causing difficulty in determining how to prioritize the information. Some of the coordinators indicated that the database used to catalog the Health Officer memos assists programs in finding the reference materials when they are needed.

A few of the coordinators noted the assistance DHMH provided in developing the minimal clinical elements for the colorectal programs which were helpful not only to the coordinators, but also to some of the providers, in ensuring services were performed in the most appropriate manner. It was suggested that it would be helpful to have minimal clinical elements developed for programs addressing other types of Cancer.

On the Cancer coordinators surveys, Cancer coordinators indicated high levels of satisfaction with assistance and guidance provided by DHMH. Greater than 90% of respondents indicated that they are satisfied with the technical assistance ($M = 4.33$) and training ($M = 4.29$) they receive from DHMH, and the availability ($M = 4.42$) and ability ($M = 4.38$) of DHMH staff to answer questions. Additionally, most Cancer coordinators (79.2%) indicated that they are satisfied with the program planning support that they receive from DHMH ($M = 4.17$).

Similarly, Cancer program coordinators appear to be generally satisfied with clarity in the instructions they receive for writing annual proposals and documenting program activities, as well as the formats for reporting their program activities. Most respondents indicated that they are satisfied with the clarity of instructions they receive for writing annual proposals (82.6%; $M = 3.96$), and for documenting program activities (86.9%; $M = 4.00$). Most feel that they are able to consistently report on their program activities using the instructions that they are given to do so (82.6%; $M = 3.96$), and are satisfied with the electronic reporting formats for education (73.9%; $M = 3.78$) and screening/treatment activities (82.6%; $M = 3.91$) and the narrative formats for quarterly and annual reports (91.3%; $M = 4.04$). Respondents expressed neutrality toward the amount of paperwork required of their programs ($M = 3.04$), with almost equal proportions of respondents indicating satisfaction (39.1%) as dissatisfaction (30.4%) with this variable.

Overcoming Barriers. As mentioned earlier, the local Cancer program coordinators were very complimentary about the support they receive from the State CRFP staff in researching issues that arise, sharing information that becomes available about latest program developments and what other jurisdictions are doing to address similar problems, and providing general program guidance. However, given that the main barriers being faced by the local Cancer programs are related to funding assistance in overcoming those barriers cannot be accomplished through administrative oversight, training, and technical assistance.

When local programs have approached the State staff with questions about planning and implementation, they have been satisfied with the responses they receive. When the programs have indicated that they have had difficulty using the data entry systems for education and screening activities, they have received appropriate training and technical assistance.

Site visits. The Cancer Centers Officers provided oversight, conducted trainings and provided technical assistance to assist grantees, coalitions, and partners at the State and local levels in planning and implementing the Cancer Program.

The cancer component provided 107 site visits between FY 2001 through FY 2005 (see Table E-1 in Appendix E). The site visits provide an opportunity for CRFP to gain insight into ground-level implementation and advise local programs in planning and implementation. Programs are re-visited if they do not implement actions targeted during site visits, so that corrective actions may be taken. The Cancer Program has designed clear instructions for staff conducting site visits that focus on planning, preparation, implementation, and follow-up procedures. During the in-depth interviews, some of the Cancer program coordinators mentioned that although there is significant time spent in preparing for site visits, these visits provide them with a wealth of knowledge and are generally thorough and constructive.

As a result of the site visits, several issues were identified and recommendations were provided. Table 6-2 illustrates the types of issues and the number of recommendations that were made since the program's initiation. Issues related to database forms were the most common, so more recommendations related to database forms were made than for any other identified issues. Program changes were recorded as having the least number of issues needing resolution or discussion.

Table 6-2. Type and Number of Recommendations Made About the Cancer Program

Type of Recommendation	Number
Coalition	45
Clinical provider	47
Human services contracts	15
Budget (modifications)	32
Program changes	11
Database forms	73
Screening, diagnosis, and treatments	64
Consent forms	34
Billing	44
Performance management goals	31
Other	30

Source: Cancer Coordinator Surveys

The Cancer Program also requires grantees to complete progress reports. The progress reports cover five topics: program accomplishments/achievements, the number of persons screened, treatment provided, challenges, and other issues.

Training, Technical Assistance, and Teleconferences. Since the start of CRFP in FY2001, the Cancer program has provided a series of regional meetings/training sessions for grantees, coalitions, and partners. In FY2002, the Cancer program expanded trainings to include "Outreach Worker Trainings," and in FY2003, the Cancer program introduced "New Employee Trainings." Trainings for using the Cancer Client Database are provided on a monthly and as-needed basis. Additionally, trainings on use of the Cancer Education Database are provided as needed. A Statewide Cancer Program meeting was conducted in each FY2003 and FY2005 (see Table 6-3).

Cancer program staff consistently sponsored teleconferences to inform grantees about the Cancer Programs and their implementation. The discussions cover general issues, such as MOTA updates; Cancer Program highlights; administrative/grants/budgets and related fiscal issues; such technical issues as surveillance and evaluation and educational database; and clinical issues. Guest speakers provide

expertise on various cancer-related topics. At the completion of each call, grantees are encouraged to send topic issues for future calls.

Table 6-3. Number of Trainings and Teleconferences by Type and Fiscal Year

Activity	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Regional meetings/ trainings	3	9	3	7	3	25
Outreach worker training	0	3	1	5	1	10
New employee training	0	0	4	5	3	12
Orientation to prostate cancer	0	0	0	0	1	1
Teleconferences	12	10	5	9	6	42

Source: Information provided by DHMH

6.1.2.4. MOTA Program

According to the MOTA program survey respondents, DHMH is doing a good job of providing support to MOTA grantees. With the exception of the level of program funding, with which approximately one-third of respondents indicated dissatisfaction (30.8%), MOTA grantees indicated high ratings of satisfaction for all program support variables included on the surveys. In fact, all MOTA respondents (100.0%) indicated that they are satisfied with the training they receive from DHMH ($M = 4.54$), the availability of DHMH staff when needed ($M = 4.69$), and the ability of DHMH staff to answer questions ($M = 4.77$), and most of the respondents indicated satisfaction with the technical assistance they receive from DHMH (92.3%; $M = 4.62$), the support they receive from DHMH in program planning (84.6%; $M = 4.38$), and the dissemination of grant opportunities by DHMH staff (76.9%; $M = 4.23$).

Overall, MOTA grantees indicated satisfaction with the tobacco and cancer data that is provided by DHMH. MOTA grantees expressed moderate satisfaction with the availability of local level tobacco data ($M = 3.85$), and high satisfaction with the availability of local cancer data ($M = 4.00$) and State tobacco ($M = 4.23$) and cancer data ($M = 4.23$). They also expressed high levels of satisfaction with the utility of the tobacco and cancer data provided by DHMH ($M = 4.46$).

DHMH is providing clear instructions for proposals and for program reporting and expectations for reporting requirements appear to be appropriate. MOTA grantees are satisfied with the instructions that DHMH provides for writing proposals ($M = 4.46$) and documenting program activities ($M = 4.54$). DHMH instructions provide MOTA grantees with the ability to consistently report their program activities ($M = 4.54$) in a satisfactory format ($M = 4.38$). Most MOTA grantees expressed satisfaction with the fiscal reporting requirements (85.3%) and a majority indicated satisfaction with the amount of paperwork required for maintaining and reporting on their grants (69.3%).

During in-depth interviews, all MOTA grantees reported receiving training or technical assistance from DHMH. When asked what aspects of these were the “most useful,” respondents most often stated those in which strategies are shared for reaching and communicating effectively with minority groups, for example, receiving organizational contact lists and training in the use of culturally sensitive terminology. The second most common response was that sustainability trainings and orientations were the most useful. Newer or smaller grantees expressed appreciation for having a safe environment to ask their questions in small-scale orientation settings. Other items reported to be most helpful were: meetings in which the vision and direction of MOTA is shared; minority roundtables; mid-year debriefings; presentations on financial close-out, reporting and budget requirements; and testimonials of community development successes. Grantees also offered that trainings are helpful because they allow them to identify and learn from both new and experienced colleagues, they allow subgrantees to build relationships with the State, and they provide necessary technical skills.

About half of the respondents indicated, when asked, aspects of the trainings or technical assistance provided by the State that they found to be “least useful.” Generally, respondents reported that the least useful meetings were those that seemed irrelevant to their particular situation. For example, more experienced grantees do not benefit from attending orientations or conferences in which they are already familiar with the information being presented, mandatory statewide cancer conferences seem less advantageous to non-practitioners, and trainings targeting larger jurisdictions seem less useful to smaller ones.

Some respondents reported a desire for additional trainings or technical assistance, the most common of which was the desire for guidance on building and sustaining relationships with community organizations. Grantees would also like to receive technical assistance on general business administration, be trained by other grantees on their reporting procedures, and hear current scientific knowledge or reports that shed light on health disparities.

6.1.2.5. Statutory Requirements

The CRFP is responsible for fulfilling the statutory requirements set forth by the State of Maryland. Some requirements affect both Cancer and Tobacco Programs. For instance, both programs are required to produce two reports annually, MFR Report discussed under question 1.1 and a Legislative report; both programs have consistently fulfilled these requirements. Of note, the Cancer and Tobacco Programs compiled Baseline reports that served as the underpinning for the programs.

Specifically, the Cancer Program is required to: 1) eliminate the greater incidence of and higher morbidity rates for cancer in minority populations and rural areas, and 2) increase availability of and access to health care services for uninsured individuals and medically underserved populations. This information is reflected in the Annual Cancer Reports. The *Annual Cancer Reports* presents data on all cancer sites combined as well as, specific cancer sites.

The statutory requirements for the Tobacco Program include the development of a comprehensive plan for tobacco use prevention, conducting the Youth Tobacco Survey (YTS) and the Adult Tobacco Survey (ATS); establishing Community Health Coalitions that reflect the demographics of the community, and implementing a Counter-marketing component. Each of the requirements has been met with the exception of the Counter-marketing Component. However, the Tobacco Program is working towards meeting this statute by enforcing a goal of outreach and awareness from the jurisdictions receiving funding.

6.1.3. What Impact did the Administrative Cost Limitations Have on Program Implementation?

Tobacco and Cancer program coordinators and DHMH staff were asked questions during the in-depth interviews to determine whether or how administrative cost limitations impact program implementation. Local Tobacco and Cancer programs agree that although the administrative cap does not pose a problem in and of itself, it does limit staffing and can be problematic when overall funds are cut. Funding fluctuations, lack of funding, and funding lags create barriers for the local programs.

State level staff also indicated that these limitations do create barriers both at the State and local level for all three programs, including staffing issues, limitations in the State and local programs’ abilities to conduct activities, limitations to coalition participation, and limitations to planning due to funding fluctuations

6.1.3.1. Local Program Coordinators Perspective

Programs have a 7% administrative cost cap built into their budgets. Tobacco program coordinators were asked whether this administrative cost cap creates a barrier for them. While the majority of coordinators indicated that the administrative cost cap is not a barrier for them, a few mentioned that it creates an issue by reducing the number of staff that they can put on the payroll to run and maintain their programs. The same was true for Cancer program coordinators, who expressed that although the administrative cost limitation does not pose a problem in and of itself, when funding is cut, the administrative funds are reduced accordingly, and this may result in staffing issues for the programs.

The issues that local programs have with funding fluctuations, funding levels overall, and the amount of time it takes for programs to receive their funding are detailed within the chapters for each program in this report. To summarize, funding fluctuations create barriers for programs in terms of planning, program continuity, and sustaining programs. Additionally, lack of funding particularly affects the Cancer programs' abilities to provide screening, diagnostic, and treatment services to meet the demands of their communities. Finally, funding lags create issues with maintaining subvendors and service providers, achieving program goals, and maintaining program staff.

6.1.3.2. State CRFP Staff Perspective

CRFP Program Staff were asked to discuss the impact of administrative cost limitations on program implementation. Program-wide limitations discussed by staff included a lack of funding for coordination across offices (Tobacco, Cancer, MOTA, and otherwise), reduced funding for local health departments, SAHC's, and office support staff.

Tobacco Program Staff. Tobacco Program Staff were asked to discuss the impact of administrative cost limitations on program implementation. Half of the Tobacco staff said that cost limitations resulted in an inability to conduct data collection and evaluation activities as planned. Half of the staff also said that there were internal frustrations due to consistently unstable funding and shifting of funds from one program to another. It was suggested that unstable funding creates difficulties in negotiating with counties.

Tobacco program staff indicated that they have insufficient overhead funding for staffing, resulting in a need to borrow positions from other programs in order to cover basic program needs. This has also resulted in a loss of the community outreach piece of the program.

Administrative cost limitations have also limited the media campaign, which was initially intended to serve as umbrella for all CRFP Tobacco initiatives, but is now dedicated only to the State Quitline. Tobacco staff indicated that there was a four to five year delay in implementing the Quitline due to cost limitations.

Tobacco staff also identified impacts of cost limitations on local programs. These included difficulty preparing in advance because the award does not come until it is approved by the General Assembly (they have to lay off employees) and difficulty enlisting participation by community members and groups.

Cancer Program staff. When cancer Program Staff were asked to discuss the impact of administrative cost limitations on program implementation, half said that the cost limitations resulted in a reduction in the types of cancers to be addressed and treated, as well as in treatment overall due to the reduction in funding for local programs. Related to this, there is a lack of funds for contingencies, such as if someone needed treatment or if there were a perforation that could lead to a physician suit if not treated. One of these respondents added that it can be unethical to screen patients if resources to treat them are unavailable.

Other issues mentioned include that programs suffer a loss of unspent funds and subsequent yearly budget cuts as a result of difficulties spending money fast enough during start-up (due to time needed to develop materials and guidelines and to overcome unforeseen complications). Also, there is limited ability to shift funds from one jurisdiction to another when one has an excess and another has a deficit.

MOTA staff. CRFP staff were asked to discuss the impacts of administrative cost limitations on program implementation. MOTA staff as well as staff from other programs made comments about the impact of cost limitations on MOTA program implementation.

Two respondents said that cost limitations affected coalition participation. One respondent said that when coalitions realized they would not be getting funding, participation decreased, and only those who were hired to attend coalitions participated but were not as passionate about the mission of the group. The second respondent said that people participated in coalitions when they were not funded, but that when funding became available through the MOTA program, only those who were funded participated.

Other impacts of cost limitations on MOTA program implementation as discussed by respondents included frustrations due to difficulties predicting budget amounts, knowing whether there will be sufficient funds (internally and for grantees), trying to maintain and grow the program and have the budget grow with it. Similarly, it was mentioned that MOTA grantees express frustration with the need to complete the same amount of work with less funding.

When the program switched from four primary grantees to 17 grantees, there was an increased program administrator workload, but there has been no dedicated staff allocated to the MOTA program. Without dedicated staff to assist the local MOTA grantees, this also may result in an inability of State MOTA staff to give local MOTA grantees sufficient guidance and to conduct necessary site visits.

6.1.4. What Factors Helped or Hindered the Administration of the Program?

6.1.4.1. Overview

State DHMH CRFP Program staff were asked to provide their input about administrative facilitators and barriers to the Program overall, as well as the Tobacco, Cancer, and MOTA programs individually.

Administrative Facilitators. The main overall facilitator is in the infrastructure of the program, which enhances collaboration and communication. A supportive environment is the main administrative facilitator for both the Tobacco and Cancer programs. For the Tobacco program the support that the Program has received from the Governor, legislative champions, the legislature as a whole, DHMH, including FHA, other Tobacco program staff, and from media contractors is a main facilitator. For the Cancer program, support among the Cancer Program staff, DHMH including FHA, the legislature, the Secretary of DHMH, medical advisory committees, clinicians, and health officers is a main facilitator. For the MOTA program, the most important facilitators for program administration are the objective management of the program; collegiality between the MOTA, Tobacco, and Cancer Programs; and having access to all of the needed resources.

Administrative Barriers. Overall administration barriers include lack of time for coordination across programs and staffing issues. For the Tobacco Program, the main barriers include the procurement process and staffing issues, including recruitment and hiring. The main barriers indicated by both Cancer and MOTA Program staff were also related to difficulties with staffing and hiring at the State level.

6.1.4.2. Administration Facilitators

Overall. State DHMH CRFP Program staff were asked to discuss any factors that they thought helped the administration of their programs. Several staff members described factors relevant to the overall administration of the CRFP program. It was suggested that the unique infrastructure of the CRFP sets it apart from the other programs. This includes the placement of the program in the Office of the Secretary which gave it visibility and credibility, enabled access to top officials in both the private and public sectors, and support from various Secretaries. Additionally, the legislation and the specificity of the legislation allowed for targeted efforts ensured that minorities were involved, and encouraged receptivity by local health departments. The theme of partnering and collaboration (among SAHCs, the state health department, and local health departments; between Tobacco, Cancer and MOTA programs; shared exposures to cutting edge advances.

Tobacco Program. State DHMH Tobacco Program staff discussed several factors that they thought helped the administration of their Program. All Tobacco staff said they thought the support they have received has been a major enabler in the administration of the program. Tobacco staff said they received positive support from the Governor, legislative champions, the legislature as a whole, DHMH, including FHA, other Tobacco program staff, and from media contractors. All Tobacco staff also said collaborations were major enablers in the administration of the program. These included collaborations between the Tobacco program and the Governor, legislators, the Secretary, DHMH, local health departments, coalitions, and the advocacy community; as well as between Tobacco Program staff. Half of the Tobacco staff also identified the following enablers to program administration: the high visibility of the program; the leverage afforded them by the statute; the leverage afforded them by CDC funding with regard to securing additional CRFP funds, and the ability to address staffing needs (through DHMH funding and approval of new positions, and ability to transition staff from other programs over to CRFP).

Other factors identified by Tobacco staff as being helpful in the administration of the program included: the good infrastructural design of the program; their ability to overcome budget cuts by reformulating priorities; the ability to conduct preliminary research during the delayed launch of the Quitline; and, expert consultants.

Cancer Program. State DHMH Cancer Program staff discussed several factors that they thought helped the administration of their Program. All Cancer staff said that the primary enabler in the administration of the program was the support they receive from one other. The Cancer staff made resoundingly positive comments about their colleagues and about the environment within which they work together. For example, Cancer staff characterized their colleagues as being good listeners, providing clear direction, being supportive, flexible, knowledgeable, committed, dedicated, personally invested, diligent, insightful, and “phenomenal.” They described the work environment as comfortable, non-confrontational, one in which everyone “sings to the same tune,” and one where staff are given the latitude to grow in their areas of interest.

Most of the respondents also acknowledged the support of others as enablers to implementation including that of DHMH, including FHA, the legislature, the Secretary of DHMH, medical advisory committees, clinicians, and health officers. Infrastructural support included IT support, funds for hardware, software, phone calls, and travel. Cancer staff also discussed enablers associated with funding. For example, Cancer staff said that they thought they were given enough funding up front to develop comprehensive programs that were able to meet high national standards, and that because they did not need to use the funding to fund deficits in the budget, they were able to make a real impact. In addition, while they said that carrying over funds across periods of performance can be problematic, they said it was helpful when, in some instances, they were able to encumber funds in upcoming years for patients diagnosed with cancer in the current year, and to shift funds within jurisdictional regions. Other enablers to program administration as

discussed by Cancer staff included the ability to hire through contracts, getting funding from FHA to fill positions; the leverage afforded them by the statute, the utility of the client database, and their relationship with the University of Maryland.

MOTA. State DHMH MOTA Program staff discussed several factors that they thought helped the administration of their program. State level management facilitators mentioned included the objective management of the program; collegiality between the MOTA, Tobacco, and Cancer Programs; and having access to all of the needed resources (such as information, staff, equipment, funding). At the local level, the legislation gives the program leverage with local health officers and having opportunities to learn from MOTA grantees during trainings are helpful aspects of the program. The new system of providing funds by percentage of minorities per jurisdiction ensures that local programs have resources to serve their minority populations.

6.1.4.3. Administrative Barriers

Overall. State DHMH CRFP Program staff were asked to discuss any factors that they thought hindered the administration of their programs. Several factors were described that are relevant to the overall administration of the CRFP program. These included a lack of time for coordination across programs (Tobacco, Cancer, MOTA, and otherwise) and the loss of benefited position slots which makes it difficult to attract quality staff and to prevent staff turnover, as well as requiring contractual hiring. In addition, staff said that there is an inadequate number of procurement and support personnel, causing individual staff to have to take on the work of multiple employees and to work long hours and holidays.

Tobacco Program. Tobacco Program staff discussed several factors that they thought hindered the administration of their Program. Half of the Tobacco staff said that the procurement process is a major challenge because it is “lengthy”, “burdensome”, and “cumbersome.” Half of the Tobacco staff also said that they faced barriers related to staffing, including recruitment and hiring. These challenges included hiring freezes, barriers to recruitment, lengthy processes, low grading of positions, a lack of sufficient staff, and a lack of permanent staff. As a result of these challenges, respondents stated that Program staff need to carry multiple positions, staff have to be hired through contracts which leads to job insecurity and resentment by permanent employees who have carry heavier workloads, and county coordinators resist developing relationships with temporary staff.

Other administrative barriers mentioned by Tobacco program staff included a lack of a team-based approach to the development of grant applications, proposal review and oversight, data collection, and training. Internal competition for funds creates difficulties for the Program. The shifting organizational program structures, as well as the need for staff to report to multiple supervisors creates some confusion and may reduce work efficiency.

Cancer Program. State DHMH Cancer Program staff discussed several factors that they thought hindered the administration of their Program. Most of the Cancer staff identified personnel issues as barriers to administration of the program. For example, half of the Cancer program respondents said turnover and the cap or loss of PINS was problematic, as it results in extended vacancies and/or staff overload, and an inability to hire people who are experienced, stable, and want the job. Respondents added that both recruitment and removal of staff are challenging. Other challenges to administration of the program as mentioned by Cancer staff included: restrictiveness of the statute, initial difficulties working with IT staff, “standard program start-up barriers,” difficulties monitoring county activity given the differences in implementation, needing to keep up with constantly changing health care recommendations, the limitation of the number of people to do case management (in accordance with CDC guidelines), and the inability of level funding to keep up with escalating costs over time.

MOTA. State DHMH MOTA Program staff discussed a few factors that they thought hindered the administration of their program. The lack of dedicated staff to administer and oversee the MOTA Program at the State level has created barriers to oversight, training, and supervision of the Program. One respondent said that a lack of time was the only barrier to program administration. Other challenges included internal staff turnover due to the dynamic nature of the job and the need for staff to be flexible.

6.1.5. What Changes, if any, Should be Made in the Administration of the Program?

6.1.5.1. Overview

Local program coordinators and State Program staff were asked to provide suggestions for changes in the administration of the Program.

Tobacco Program. Local Tobacco program suggestions include loosening the statute funding requirements, improving communication with DHMH and among local programs, redefining program performance measures, and increased programmatic training opportunities. State DHMH Tobacco Program staff suggested improvements to quality assurance at the local level, revisiting strategic planning issues, increasing staff to assist with the procurement process, increasing media funding, and shifting focus from racial minority to cultural disparities.

Cancer Program. Local Cancer program suggestions focused primarily on issues related to program funding including increasing funding; disseminating funds in a more timely manner; extending the life of the funds across fiscal years due to the dynamic nature of the demand for services; reallocating resources across jurisdictions where the funds are not being used; and providing a mechanism for obtaining funds for treatment through the CRFP. State DHMH Cancer Program staff suggestions included changes in staffing restrictions, increasing funding for the Cancer program overall and annually, and enabling movement of funds between jurisdictions.

MOTA Program. Administrative changes suggested by MOTA grantees included reducing the required paperwork and documentation, and improving communication between MOTA grantees, local health program coordinators, and State and central office staff. State DHMH MOTA staff suggested creating dedicated staff positions to oversee the program and assist with program planning and implementation, developing guidelines and standards for coalitions, and enhancing communication and collaboration at the State level.

6.1.5.2. Suggested Changes: Tobacco Programs

Local Tobacco coordinators and local health officers. As mentioned in Chapter 3 of this report, during the in-depth interviews, Tobacco program coordinators and local health officers primarily suggested administrative changes to benefit program planning and implementation. These suggested changes included loosening the statute funding requirements to allow local programs more flexibility in how they allocate their funds according to community needs. It was suggested that this will allow local programs to be more responsive to increasing or changing needs in their jurisdictions.

Communication between DHMH staff and local programs, and among local programs, was another area in which programmatic changes were suggested. Tobacco coordinators indicated that more utilization of telephone conference calls or email to inform local programs about what the State staff is learning about advances or recommendations for program improvement would be beneficial. Coordinators also indicated that better communication about where funding is going in their communities and how it is being used, as in the case of the MOTA programs, is needed. They would like to have a mechanism by which they can discuss planning and implementation issues with other local Tobacco program coordinators, such as a list-

serve or an Internet web page. Through this type of mechanism, they can assist one another in finding resources or problem solving.

Some local program coordinators expressed concern that the current program performance measures do not allow them to accurately depict their program activities. They also expressed some confusion about why the current performance measures were chosen, and what relationship they have to the CDC's best practices recommendations. Data concerns were shared by some local health officers, as well. They indicated that the current reporting requirements are cumbersome and time consuming, and that they have not been consistent over time. Suggestions for improving the data reporting include clarification about local data measures and operationalization of the data elements to streamline the reporting among all of the jurisdictions. Another data-related suggestion made by both local program coordinators and local health officers was to have more frequent outcomes data collected and available for review – at least biannually. Program coordinators indicated that the current lag in data availability makes it difficult for them to determine the effectiveness of their programs, and to make appropriate changes in their planning and implementation.

While program coordinators consistently indicated their satisfaction with the regional meetings, and expressed their satisfaction with the information that they obtain at those meetings, some coordinators suggested that provision of more programmatic training and technical assistance would improve program functioning. Specifically, coordinators mentioned the need for training or technical assistance in the areas of policy promotion, youth outreach, statewide tobacco control, and program capacity building.

Finally, a few local Tobacco program coordinators indicated that reducing the lag between grant application and funding would benefit program planning and sustainability. Funding delays make it difficult for programs to fully implement their planned activities, because they reduce the amount of time within which subvendors and staff have to accomplish their goals. Similarly, reducing funding fluctuations would benefit the local programs by enabling them to plan early and approach an appropriate number of subvendors for assistance in the planning and implementation process.

State DHMH Tobacco Program staff. Tobacco Program staff were asked to discuss any changes that they thought should be made in the administration of their program. Most of the Tobacco staff said that quality assurance needs to be improved at the local level. For example, staff stated that county programs should be managed as evidence-based programs, such as by revising the way the programs are funded to reflect the CDC best practice recommendations and the CDC logic model. They thought therefore, data collection at the local level should be based on CDC indicators. Staff added that online data collection would be ideal. On a related note, half of the Tobacco program respondents thought that counties should be provided with more guidance on what they should be doing with their funds via trainings that build capacity and generate interest. It was also suggested that an accountability program should be added for the schools.

Half of the Tobacco program respondents recommended revisiting strategic planning issues. For instance, staff said that active and continued improvement should be made to the program based on emergent federal recommendations and by using evaluation research findings. Half of the Tobacco program respondents also suggested adding staff to help with the procurement process, increasing funding for the media campaign, and moving away from a focus on tobacco use by race to a focus on tobacco use by cultural disparities.

Some recommendations about data collection were made by Tobacco program staff, including improving data collection on underserved minority populations and fostering a better understanding of sampling and sample selection. It was also suggested that operations, content, and oversight of proposals should be discussed as a team. It was recommended that the Program focus on passing the Clear Indoor Air Act next session, and on sustaining funding for the Program to ensure success in the long term

6.1.5.3. Suggested Changes: Cancer Programs

Local Cancer coordinators and local health officers. The suggested changes made by local Cancer program coordinators and local health officers focused primarily on issues related to program funding and included increasing funding; disseminating funds in a more timely manner; extending the life of the funds across fiscal years due to the dynamic nature of the demand for services; reallocating resources across jurisdictions where the funds are not being used; and providing a mechanism for obtaining funds for treatment through the CRFP.

Currently, there is some concern that programs cannot provide treatment funding for individuals who screen positive for cancer through the local screening programs. To strengthen the programs, both coordinators and local health officers indicated that there should be some mechanism for providing treatment funding through the CRFP in such situations. Alternatively, programs would benefit from receiving targeted training on accessing other treatment resources that may be available to their populations, such as Medicare and Medicaid. Addressing this issue may facilitate getting uninsured or underinsured population to access the available screening services by ensuring that they will be able to receive treatment as needed.

Some local health officers recommended reducing the reporting requirements for the local Cancer programs. It was suggested that if the reporting requirements for all program aspects were integrated into a single reporting system, it might ease the reporting burden. Furthermore, some feel that the reporting requirements for the education activities are excessive in comparison to the utility of the information.

Some of the coordinators from smaller jurisdictions suggested that because they have limited resources to participate in various events presented by DHMH, they should not be required to attend events that do not have direct applicability to their programs. Convenience for training was also an issue mentioned by some of the coordinators. Staff from remote areas of the State must often travel long distances to participate in trainings. Some suggestions to alleviate this problem included providing local or regional trainings; conducting on-line training, particularly when providers may be part of the audience; and placing training materials on a CD ROM so that when the participants get back to their work environment, they can refresh their memory of the training events.

State DHMH Cancer Program staff. Cancer Program staff were asked to discuss any changes that they thought should be made in the administration of their program. All of the Cancer Program staff made recommendations related to staffing. For instance, program staff suggested restoring PINS that were lost to prevent burnout and creating more PINS to enable the hiring of competent staff, employee job satisfaction, and more opportunities for confident delegation of tasks. Requested staff positions included those for nurses, IT support, and programming database administrators. Most of the Cancer staff made suggestions regarding funding. For example, staff suggested increasing funding for the Cancer program in general, and specifically increasing funding from year to year, as opposed to level funding from year to year, in order to prevent inability to keep up with increasing cost of living costs, etc. Other funding-related suggestions included providing a mechanism for moving funds between counties to encourage the positive effects of competition between counties and for moving money forward across periods of performance. Other suggestions for changes to the Cancer Program included having the legislature decide their budget at the beginning of the legislative session instead of at the end, and allowing a focus on other cancer related issues such as obesity.

6.1.5.4. Suggested Changes: MOTA Program

Local MOTA grant coordinators. Suggestions for administrative changes provided by MOTA grantee coordinators included reducing the required paperwork and documentation, such as requiring either quarterly or annual reports, but not both. Improving communication between MOTA grantees, local

health program coordinators, and State and central office staff was another administrative suggestion made by MOTA grantees. They indicated that holding a meeting between local health departments, MOTA grantees, and the State central office to discuss general expectations and strategies for coalition building would benefit their abilities to work in conjunction with the local programs.

State DHMH MOTA Program staff. MOTA Program staff were asked to discuss any changes that they thought should be made in the administration of their program. Most of the MOTA staff suggested allocating dedicated staff to assist with grants, evaluation, site visits, and training and guidance for MOTA grantees. Another suggestion by MOTA staff included developing guidelines and standards for coalitions that include the description of the coalition mission, goals, vision, activities, standards of operation, and procedures for such things as agenda sharing and speaker acquisition. Additional recommendations included enhancing communication and collaboration by: holding meetings with CRFP staff to coordinate activities; having combined meetings, trainings, and/or retreats that would include all CRFP staff, local coordinators, and SAHCs; encouraging relationships between local programs and SAHCs; having regular conference calls throughout the year; obtaining shared knowledge about local activities in the beginning of the year (including other relevant programs outside of CRFP); holding regional meetings at the local board level that include local health departments; and, posting a coordinated calendar to include coalition meetings in the upcoming year.

Chapter 7: Limitations

7.1 Limitations to the Tobacco Program Findings

7.1.1. Overview

The biggest limitation to evaluating the Tobacco Program is lack of process measures that can be related or linked to local and statewide outcomes. A second limitation is the difficulty in securing unduplicated counts for education attendance and school-based program participation. A third limitation is that program activities are not operationally defined, and some programs do not feel that the current measures allow them to reflect their program activities appropriately. A fourth limitation is a lack of measurable outcome expectancies for education activities at the local level. A final limitation is that the surveillance data used for examining program outcomes has not been finalized, so the outcomes data reported here should be viewed as an initial analysis.

7.1.2. Lack of Relatable Process Measures

While reductions in youth tobacco initiation, tobacco-related risk behaviors among youth and adults, negative disparities in tobacco related risk behaviors, and secondhand smoke exposure are statewide goals of the Tobacco Program, the effectiveness of program activities in promoting these goals cannot be directly assessed. While some assessment of process effectiveness can be made in terms of the number of adults and youth attending community and school-based activities, number of enforcement activities conducted and citations given, and number of cessation participants and cessation aids distributed can be made, linking these activities to outcomes is not possible due to the following:

1. The current activities tracking system was created solely to track local activities, not for the purpose of examining effectiveness of local activities toward achieving statewide goals.
 - a. Local program measures are not linked with statewide surveillance outcomes, and no local outcomes have been created for individual programs.
 - b. The ability to evaluate the Program is limited to evaluating based on fairly distal outcomes as shown in statewide survey data. There currently is no quantitative program data that monitors progress toward specific client/consumer outcome goals, which could then be used to monitor the more direct impact of programming.
2. The local program measures are broad, element-based measures that do not provide details for examining how differences in strategies within a program element might differentially affect program outcomes. For example:
 - a. Community-based education activities are not defined in the database. They may include activities such as attending a health fair, presenting a seminar at a community function, or including a tobacco discussion at a church service. Different types of community-based activities are likely to have differing levels of effectiveness, and these differences cannot be discerned through the current data.
 - b. School-based activities are also not defined in the quantitative data that is collected, leaving no way to determine whether some school-based strategies are more or less effective than others.
 - c. Awareness campaigns may include television and radio advertising, mass mailings, billboards, presentation at movie theaters. Some programs may also include placing a poster in a public area.

These activities are likely to reach different sized audiences, and may result in different levels of effectiveness.

3. There are currently no consistent measures to indicate what types of messages are being distributed through the local public health component of the Tobacco Program.
 - a. Although local programs indicated that they are increasing awareness about tobacco-related issues in their communities, and the statewide surveillance data supports this, there is currently no way to measure empirically whether local efforts are driving differences in tobacco-related attitudes and beliefs.
 - b. While the surveillance data that is collected allows local programs to examine how outcomes have changed over time, local programs are not linking their local performance goals to direct outcome measures in their annual proposals. Therefore, local successes and needs for improvement cannot be fully assessed using the current data.
4. The Local program tracking data does not provide population breakdowns for community-based and school-based activities. Although some programs and subvendors report breakdowns in race and ethnic minority population attendance for some activities, this data is not consistently collected.
5. Data about cessation activities provided under the local public health component of the program is limited to counts of individual and group counseling, and number of cessation aids distributed. While quit rates among individuals who complete cessation is collected by the local programs, information about the type of counseling (for example, telephone or brief intervention), the number of sessions, and follow-up data examining outcomes over time, are currently not linked to the quantitative database. This makes it difficult to link cessation activities to cessation outcomes at the local and statewide level, and to examine effectiveness of different types of cessation activities.

7.1.3. Duplicated Counts

The data reported in the Tobacco Program tracking database reflects total attendees to program activities, as opposed to individuals. Combined with a lack of information about the topic of focus of most community and school-based activities, the types of activities, and the number of activities, these counts become less informative. Thus, caution must be taken when reviewing reach information for program activities.

7.1.4. Lack of Operational Definitions

Local program coordinators indicated that they do not understand some of the required data elements that they must report to the State. An examination of the subvendor reports reveals that different programs define data elements in different ways and individual programs change their own definitions from year to year. For example, when specifying "Type of Organization" on the Subvendor Report Form, jurisdictions assign their subvendors to categories and this categorization has varied within jurisdictions, among jurisdictions, and across years. Some local program coordinators indicated that the current program activity measures do not allow them to adequately represent what their programs are doing locally.

7.1.5. Lack of Expected Outcomes for Education

Although the local programs engage in a high volume of education activities, there are no specific education-related outcome goals being measured. Assuming that there are differences in education emphasis at the local level, both between jurisdictions and over time, general measures of awareness included on the statewide surveillance surveys may not provide a good assessment of program effects. A

better measure of the effectiveness of the education activities of the local programs would involve an assessment of local level education goals, and creation of awareness measures that map onto those goals.

7.1.6. Lack of Finalized Outcomes Data for 2006

Maryland has collected MATS and MYTS data for 2006, and that data is presented in this report. Although Maryland is one of few states to have the 2006 data available, the MATS and MYTS outcomes data reported in this evaluation are based on initial analyses of the datasets. Although data handling, preparation, and weighting was conducted based on CDC data handling recommendations, the 2006 data was not prepared by the CDC. Additionally, the evaluation team was not involved in the published data analyses for the 2000 and 2002 data sets. Although the evaluation team attempted to replicate findings from the prior survey years and to retain consistency in data handling from prior analyses, in some cases the data analyses did not replicate exactly to prior published accounts. In most cases the lack of exact replication resulted in proportion differences in the hundredths or tenths of a point at the State level. For the 2000 youth data, where it was available, published versions of the data were used in this report. Because the 2006 data will be handled by the organization that has historically managed and analyzed the MATS and MYTS data, and there may be some differences in data handling, there may be slight variations in future analyses but these should not affect the overall trends revealed in the current report.

One important definitional issue: CDC defines an adult as a current cigarette smoker if he or she has smoked 100 or more cigarettes in his or her life and if he or she has smoked one or more cigarettes in the prior 30 days. Due to incomplete data on lifetime cigarette use in the 2000 and 2002 surveys, the CDC definition of current smoker for adults was not used in this analysis. To maintain a consistent definition across the three survey years, adults were classified as current smokers on the basis of smoking one or more cigarettes in the prior 30 days, regardless of the number of cigarettes smoked in his or her lifetime. It should be noted that not including this precursor question allows uniformity across youth and adult datasets.

7.1.7. MATS and MYTS Survey Changes

Changes in wording and/or structure of questions or response options from one survey year to another sometimes limited comparability between years. Some changes improved the questions (e.g., eliminations of potential social desirability from intent to quit items), but still limits the ability to compare trends across time. This data limitation does not affect prevalence estimates.

7.2. Limitations to the Cancer Program Findings

7.2.1. Overview

The biggest limitation to evaluating the Cancer Programs is lack of outcome measures that can be linked directly to the program. A second limitation is the difficulty in securing unduplicated counts for education attendance in general and for screening services across years. A third limitation is that some program data was not available for use in the evaluation. A final limitation is a lack of measurable outcome expectancies for education activities at the local level.

7.2.2. Lack of Direct Outcome Measures

While reduced overall cancer mortality and reduced disparities in cancer mortality between race/ethnic minorities and whites are two of the overarching goals of the Cancer Program, the effectiveness of the program in terms of these outcomes cannot be directly assessed. While an assessment of process effectiveness can be made in terms of the number of people educated, screened, and linked to treatment,

and the proportion of racial/ethnic minorities served in these three ways, directly linking these activities to outcomes is not possible due to the following:

6. Budget and budget reconciliation information does not allow an assessment of the amount of local funding individually allocated to screening, diagnostic services, treatment, and education.
 - a. Cost efficiency and effectiveness among local programs cannot be assessed.
 - b. An empirical examination of how funding fluctuations affect program priorities and activities cannot be performed.
7. Data collected via DHMH's Cancer Screening Database does not allow an examination of whether individuals receiving screenings have entered that phase as a result of having received education through the Program for two reasons:
 - a. Responses to the question asking how individuals learned about the availability of screening are not required, and
 - b. Response options to this question do not allow a determination of whether the source of information is connected with the CRFP.
8. Measures to gauge changes in public awareness of screening guidelines or awareness of the need for cancer screening have not been consistently collected, local programs do not currently measure awareness outcomes due to their education activities, and a lack of recognizable branding may make it difficult to differentiate between increased awareness due to CRFP efforts versus efforts of national screening programs implemented by the CDC.
 - a. Although local programs indicated that they are increasing awareness about cancer-related issues in their communities, there is currently no way to measure this empirically.
9. Statewide benchmarks and goals may not be appropriate for determining program effects, as some cancers are only addressed by limited localities, and program focus may vary from jurisdiction to jurisdiction.
 - a. Statewide screening measures (such as those provided by BRFSS) may not be sensitive to jurisdiction-level fluctuations in screening provision.
 - b. Statewide mortality measures may not capture changes that occur at the local level, but local level mortality rates may be too low to provide meaningful estimates.
 - c. Statewide benchmarks and goals set in MFR reports do not allow an examination of local benchmark and goal setting and achievement, and local programs are not held to the performance goals set in their annual proposals. Therefore, local successes and needs for improvement cannot be assessed using the current data.
10. National mortality measures are only available through 2003, so examining comparative trends as the program has matured is not possible.
 - a. Because there are a number of factors that contribute to cancer mortality, and early screening and detection may not have immediate effects on mortality outcomes examining mortality trends over such a short period of time cannot capture future gains that might be associated with the Program.

7.2.3. Duplicated Counts

The Cancer Program has a fairly sophisticated data collection system that collects useful information about education, screening, diagnosis, and treatment. However, the education data in this report reflects total attendees to education sessions, as opposed to individuals receiving education. A single individual who attends an education session about colorectal, prostate, and oral cancer would correctly be counted as having received education about each. However, when calculating overall education provision, it is important to consider this fact, and to not confuse attendees with individuals. This may also be why education provision does not appear to fluctuate as dramatically as screenings when funding amounts fluctuate.

The Breast and Cervical Cancer Database does not provide a count of individual women who receive breast cancer screening services, rather it provides the number of screening services provided by screening cycle. Additionally, data regarding the overall number of individuals screened throughout the evaluation period (FY2001-FY2006) was not readily available, so individuals who received screenings for multiple cancers, as well as those who received multiple screenings across years were counted multiple times.

7.2.4. Unavailable Data

Because the Breast and Cervical Cancer Database is being restructured, the 2006 jurisdiction-level data was not available. Additionally, diagnosis and treatment outcomes data, while available by jurisdiction was provided too late to be included in the evaluation.

7.2.5. Lack of Expected Outcomes for Education

Although the local programs engage in a high volume of education activities, there are no specific education-related outcome goals being measured. With the exception of awareness for colorectal cancer screening tests, the MCS did not test awareness of any available cancer screening tests in 2004. As with the issues raised in section 7.2.1, statewide awareness measures may not capture local level efforts. Furthermore, assuming that there are differences in education emphasis at the local level, both between jurisdictions and over time, general measures of awareness may not provide a good assessment of program effects. A better measure of the effectiveness of the education activities of the local programs would involve an assessment of local level education goals, and creation of awareness measures that map onto those goals.

7.3. Limitations to the MOTA Program Findings

7.3.1. Overview

There are two main limitations to the MOTA Program findings. First, the MOTA grantee activity data does not provide details about the activities that are being carried out. Second, there are few outcome goals established for the MOTA programs, so the evaluation is limited to examining processes of the program.

7.3.2. MOTA Grantee Activity Data

Beginning FY2004, MOTA grantees have been required to submit statistical reports that quantify their activities and program reach. These reports capture the number of activities that grantees are performing, and the number of people reached, within a number of categories set by DHMH. However, the purpose of the statistical reports is not to collect details about the activities that indicate how the activities are carried out and how reach is defined. Therefore, the activity details in the statistical reports are not detailed

enough to allow an examination of the types of outreach and technical assistance activities that are being performed by MOTA grantees. Therefore, it is difficult to tease out the MOTA activities from Tobacco and Cancer Program activities and to determine the value added by the MOTA activities. To the extent that there is interest in finding out how MOTA activities differ in type and effectiveness from other Program activities, it will be important to devise a way to gather more detailed information about the grantee activities in a standardized way, using operational definitions of activities so that reporting is standard across programs.

7.3.3. Lack of MOTA Outcomes Measures

Although annual performance goals that allow an examination of program process are set for each of the MOTA grantees, few outcome goals have been identified for the MOTA programs. Aside from the outcome of increasing grant applications and grant awards, all of the current performance measures are process-related. Also, it is important to include information about contributing factors outside of the Program's control when reporting and examining outcomes. For example, grant applications and awards are affected not only by training minority programs to complete applications, but also by the number of grant opportunities available. If one of the MOTA grantee functions is to assist local minority programs in identifying grant opportunities, the number of grant opportunities identified would serve not only as a process measure, but also as a way to view the associated outcome measures (if there are few opportunities available, the potential for increasing the outcomes is limited).

7.4. Primary Data Collection Limitations

7.4.1 Overview

There were some limitations to the primary data collection methods and materials. These limitations did not have an effect on the outcomes reported in this evaluation.

7.4.2. Survey Limitations

7.4.2.1. Coalition Members Survey Response Rate

Although multiple invitations were prepared to be sent to coalition members and several jurisdictions received hard copy surveys to distribute to their members, the response rate for the Coalition Members Surveys was less than 25% for both the Tobacco and Cancer programs, with only six Tobacco and five Cancer programs reaching representation of 50% or higher. Therefore, meaningful comparisons between jurisdictions were not possible. Furthermore, with such a low response rate, the sample may not be representative, so generalizing the findings across coalition members can not be done.

7.4.2.2. Coalition Members Survey Technical Issues

For the first day that the Coalition Members Survey was live, a technical glitch brought respondents back to the opening page of the survey when they submitted their final responses. Although this did not result in any loss of data, it did create some confusion among respondents. Two respondents called the technical support phone number to make sure that their survey responses were submitted.

Although the survey instructions indicated that participants should fill out a separate survey for each jurisdiction in which they are coalition members, three respondents were removed from all analyses because they indicated more than one jurisdiction on a single survey. One respondent was removed from all analyses due to entering "none" in response to the jurisdiction question.

Nine respondents did not indicate the type of coalition they were on, so were not asked any of the coalition-specific questions. These respondents were removed from all analyses.

One coalition member who wanted to participate in the survey called for technical support, indicating that the on-line survey would not load, but this was a unique issue. A hard copy of the survey was sent for completion.

7.4.3. In-depth Interview Limitations

7.4.3.1. Interview Methodology

Interviews were audio recorded and transcribed for analysis. One jurisdiction declined to consent to having the local health officer and Tobacco and Cancer coordinators interviews recorded. For that jurisdiction, the interviewer took notes during the interviews, and the notes were used for conducting the qualitative analyses.

During six early interviews (two local health officer, two Tobacco coordinator, and two Cancer coordinator), one interviewer combined some of the question probes rather than asking each probe separately. This may have resulted in less detailed responses to the affected probes. However, this limitation did not affect the ability to identify emerging themes resulting from question responses.

A portion of one local health officer interview was inadvertently taped over. The interviewer contacted the local health officer and repeated the portions of the interview that were lost. The repeated portion of the interview took place over the telephone, and the missing data was recovered.

7.4.3.2. Interview Terminology

Interviewers observed that on some occasions MOTA grantees understood the terminology in the interview instrument differently from what was originally intended. This caused confusion during the interviews and raised doubts as to whether certain questions were properly understood across interviewees. For example, in the instrument, “coalition” referred to the local health departments’ tobacco or cancer coalitions. However, since some MOTA organizations also have internal groups or inter-organizational networks called “coalitions,” they responded to these questions with those in mind. Occasionally, respondents misunderstood what was meant by “local data” or “statutory requirements.” Care was taken to clarify confusion whenever possible. During the analysis process, in the few cases where the intended meaning of the responses could not be determined, the data was removed from the analysis.

7.4.3.3. Technical Issues

Due to technical difficulties with the audio equipment, a total of five interviews were not fully recorded for transcription. These interviews were analyzed using notes that were taken during the interviews. Although some detailed information may have been lost using notes, the thematic information used in the qualitative analysis was not compromised.

Chapter 8: Recommendations and Future Directions

8.1. Tobacco Program Recommendations

8.1.1. Overview

The recommendations for the Tobacco Program are derived from the limitations encountered during this comprehensive evaluation and the suggestions made by the local Tobacco program coordinators, local health officers, and the State DHMH Tobacco Program staff. Recommendations are made in the following areas: data collection, monitoring, and evaluation; programmatic issues; funding; and administration. For each recommendation, the recommendation is stated, followed by the evidence for formulating the recommendation, and further explanation of the recommendation.

8.1.2. Data Collection, Monitoring, and Evaluation

8.1.2.1. Data Collection

Tobacco Program Data Collection Recommendation 1:

- **Create operationalized local program data collection variables in coordinator with the local public health component, the surveillance component, and the local programs.**

Evidence:

1. As indicated in Sections 3.1.2.2 and 3.1.2.3 of this report, the data that is collected for quantifying the local Tobacco program activities lacks details to enable an examination of how differences in local program activities affect outcomes.
2. As noted in Section 3.1.2.7 of this report, the current data collection does not provide a way to quantitatively examine local level outputs and outcomes against local level program goals and expectations
3. As reported in Section 3.1.10.10 of this report, some local Tobacco program coordinators do not feel that the current reporting measures allow them to depict their program activities appropriately

Explanation: In order to evaluate how the local programs are affecting local and statewide outcomes, consistent and valid measures must be created and collected. Currently, local programs report narrative information about their program activities that cannot be readily connected to quantitative performance measures that are being reported. Programs do not have operationalized definitions to ensure consistent and standardized reporting schema within which to report their activities, resulting in information that may not be comparable across jurisdictions. By creating operationalized reporting measures, the State will enable comparisons across jurisdictions and over time. These comparisons will allow the Program to determine which interventions are working, where they are working, and how they are working.

Tobacco Program Data Collection Recommendation 2:

- **Create a data system for collecting detailed, quantifiable local program activities data. Explore ways to reduce duplications in data collected under the community-based, school-based, and enforcement elements.**

Evidence:

1. As indicated in Sections 3.1.2.2 and 3.1.2.3 of this report, the data that is collected for quantifying the local Tobacco program activities lacks details to enable an examination of how differences in local program activities affect outcomes.
2. As reported in Section 3.1.2.7 of this report, the evaluation did not reveal significant relationships between selected local program activities measures and attitudinal and behavioral outcomes measures.
3. As reported in Section 3.1.2 of this report, duplicate counts make it difficult to determine the reach and concentration of the local Tobacco program activities.

Explanation: The current data does not allow an examination of the relationship between local Tobacco program activities and local or statewide outcomes. Although this evaluation found that there have been reductions in prevalence of tobacco use over time, it was unable to link those reductions specifically to Tobacco Program activities. Even where narrative data contains details about local program activities, this data cannot be used to evaluate program effectiveness. The mechanisms by which local programs are disseminating educational messages and promoting awareness are not currently linked to quantitative information about activities and reach, nor are the details about the messages that are being disseminated. This makes any examination of awareness and attitude change impossible to link to what local programs are doing. If a statewide countermarketing and media component is funded and implemented, awareness measures associated with the activities of that component will need to be created and measured, as well.

To reduce duplications in data collection under the local health component of the Tobacco Program, any data collection system that is created and implemented should collect not only the number of individuals reached by a particular activity or group of activities, but also the location in which the activity took place. For example, a school-based program may conduct five activities at five different schools, reaching 500 students in each, resulting in a reach of 2,500 with a low concentration (one exposure); another school may conduct five activities at a single school, reaching 500 students, resulting in a reach of 500 with a high concentration (five exposures). The current data collection does not allow this level of examination of reach and exposure, so it is not possible to determine which approach works better (or if both are equally effective). Because this information is already required in the narrative portion of local program reports, there is no added data collection burden to the local health programs. In fact, if local programs can run reports from the data collection system, they can use that information to populate the narrative sections of their quarterly and annual reports.

Tobacco Program Data Collection Recommendation 3:

- **Examine the types of messages that local programs are distributing via awareness and education activities. Examine details about how messages are being disseminated. Create outcome measures that can inform whether the messages are effective. Measure the outcomes to examine whether messages are increasing awareness.**

Evidence:

1. As indicated in Section 3.1.2.6 of this report, local Tobacco program coordinators feel that one highlight of their programs is that they have raised awareness about the health risks of tobacco in their communities.
2. As reported in Section 3.1.2.7 of this report, the evaluation team was unable to link selected outcomes to selected program activities.

Explanation: Distal measures about awareness of tobacco risks (such as those collected on the MATS and MYTS) do not inform the program about what messages that are being disseminated by local programs are actually reaching and affecting their intended audiences. Given that an important aspect of the program, from the local perspective is that it has raised awareness about tobacco-related risks, it would be helpful to determine whether there is support for this assumption, and to further determine what types of awareness have been increased, and what mechanisms for increasing awareness have been most successful.

Tobacco Program Data Collection Recommendation 4:

- **Collect population information for community and school-based activities.**

Evidence:

1. As indicated in Section 3.1.2.6 of this report, local health officers feel that they have been successful in reaching minorities in their communities through their programs.
2. As reported in Section 3.1.5 and 3.2.1.2 of this report, the quantitative data collected by the Tobacco Program about community-based local Tobacco Program activities does not provide audience breakdowns for many measures. Additionally, narrative information provided by subvendors does not provide streamlined or consistent measures from which to make quantitative estimates of program participation among target populations.
3. The MATS and MYTS collect outcomes data that can be examined by gender, age, race, and ethnicity.

Explanation: Because reaching specified target populations is an important element of the CRFP Tobacco Program, local program reporting should be revised to enable examinations of the extent to which the Program is reaching target populations through local program activities. Having this detailed information may allow links to be made between local program activities that focus outreach and/or services to particular populations and outcomes collected by the MATS and MYTS.

Tobacco Program Data Collection Recommendation 5:

- **Conduct surveillance surveys (MATS and MYTS) at least biennially.**

Evidence:

1. As reported in Section 3.1.6.2 of this report, local Tobacco program coordinators use the MATS and MYTS data to guide their program planning.
2. As indicated in Section 3.1.9 of this report, funding for fielding of the MATS and MYTS was not available in 2004, so the surveys were fielded in 2000, 2002, and 2006.
3. As noted in Section 3.1.6.2 of this report, almost one half of local Tobacco program coordinators indicated dissatisfaction with the frequency with which outcomes data has been available to them. Local Tobacco program coordinators indicated that it would be helpful to have data more frequently.
4. As indicated in Section 3.1.11.2 of this report, most local Tobacco program coordinators would like to have outcomes data available biennially.

Explanation: Having lengthy gaps in outcomes data makes it difficult to fully examine trends, and to make comparisons between Maryland, other states, and the nation. Furthermore, it makes data-based Program planning difficult. By collecting the MATS and MYTS every two years, trends can be consistently examined and local programs will have sufficient data to use when planning their programs and interventions.

Tobacco Program Data Collection Recommendation 6:

- **Implement an annual Coalition Members Survey.**

Evidence:

1. The statute mandates that under the local health component of the CRFP, community health coalitions should be formed and maintained, with racially and ethnically diverse membership that is also representative of community segments. Each year the community health coalition will work with their local health departments to update annual local Tobacco plans and implement tobacco use prevention and cessation programs.
2. As evidenced by the inclusion of the questions in Section 3.3 for the comprehensive evaluation, the Department is interested in examining how well the community health coalitions are working in their jurisdictions, and the extent to which coalition members are active in planning, developing, and implementing the local programs.
3. As indicated in the Limitations Section of this report, response rate to the Coalition Members Survey fielded for this Comprehensive Evaluation was rather low, and did not allow for an examination of coalition member differences between jurisdictions. While the reasons for the low response rate are not clear, making the survey participation a standard portion of annual coalition membership renewal is likely to increase the response rate.

Explanation: Increased survey response rates will allow an examination of coalition differences between jurisdictions. With regular collection of this data, changes in coalitions can also be tracked over time. The Department and the local Tobacco programs can include questions of interest on the survey to assist in maintaining and developing coalitions that are effective and efficient and serve the Program needs.

8.1.2.2. Monitoring

Tobacco Program Monitoring Recommendation 1:

- **Revise annual local program performance targets according to actual annual budgets, and monitor local progress toward those targets. Link annual local program performance targets to State level annual goals and expectations (and assist local programs in creating performance targets that feed into the State level goals and expectations).**
- **Provide periodic feedback to local programs regarding their progress toward meeting their annual performance targets. Work with the local programs to determine what feedback information would be most useful for them. Utilize the data from the local Tobacco program activities databases to provide performance feedback.**

Evidence:

1. As mentioned in the limitations section of this report, there is currently no mechanism for monitoring the degree to which local programs are achieving their annual performance measures that allows the process data to be linked to local or State level outcomes.
2. Currently the statewide Program goals that are set in the annual MFR reports do not set annual goals for local program activities.
3. Links between the statewide annual expectations and goals and local level annual expectations and goals are not evident.
4. As reported in Section 3.1.10.2 of this report, some local Tobacco program coordinators do not see the value in reporting the volume of data required. In addition, some local Tobacco program coordinators expressed the need for a better understanding of the data elements that are collected by the State about their programs.

Explanation: Although the programs are administered at the local level, measurable goals are set solely at the statewide level. To determine what changes should be made to the local health component of the Program, it is important to determine how it is working at the level at which it is administered – this is where any programmatic shifts would be made for improvement and enhancement. Setting annual statewide goals to determine program effectiveness should be done with each program element and with local performance expectations in mind, and the links between statewide goals and local performance expectations should be made explicit. By using the data that is submitted by the local Tobacco programs to enhance program monitoring, and to support programmatic recommendations at the local level, the utility of the data collected and reported may be more evident to the local Tobacco program coordinators. Providing periodic feedback to the local program coordinators about how they are progressing toward achieving their annual targets and contributing to the statewide annual goals will help to inform planning and implementation of the local programs.

8.1.2.3. Evaluation

Tobacco Program Evaluation Recommendation 1:

- **Implement regular Program evaluations (annual or biennial).**
- **Determine areas of interest from the current Comprehensive Evaluation for more in-depth examination to incorporate greater depth in on-going Program evaluations.**

Evidence:

1. Although the Surveillance component, collects and reports on the MATS and MYTS, and there have been some examinations of issues of interest (such as DiClemente's examination of youth tobacco trends relative to school-based activities), this Comprehensive Evaluation is the first evaluation of the Program to be done since its inception.
2. Due to the scope of the evaluation, both in terms of questions to be addressed and the period of performance under review, a broad examination of the CRFP Tobacco Program from a statewide perspective was performed, but in-depth examinations of each question were not possible.

Explanation: Regular Program evaluations will allow the Program to examine trends as they occur. Regular evaluations will allow the Program to determine where there are needs for programmatic changes and enable consistent examinations of how adjustments to the Program affect outcomes.

Tobacco Program Evaluation Recommendation 2:

- **Include a local evaluation component that includes local program goals, expected outputs and outcomes, and an evaluation plan to measure progress toward local goals in local Tobacco plans.**

Evidence:

1. The structure of the CRFP is for planning and implementation to occur at the local level.
2. This Comprehensive Evaluation, while examining processes at the local level, examines progress at the statewide level, based on State level outcomes expectations.
3. As reported in Section 3.1.2.7 of this report, the evaluation team had difficulty connecting distal outcomes that are measured by the MATS and MYTS to local-level activities as they are currently measured.

Explanation:

Local evaluation components could either be carried out by the local programs (assuming evaluation funding is available to do so), or could be incorporated into annual or biennial comprehensive evaluations. With local program level process and outcomes goals, measures can be created to determine the extent to which local program activities are working as intended and how the local activities are contributing to accomplishment of statewide goals. Incorporating local or statewide outcomes that are connected specifically to local activities and processes will enable the State to determine what interventions and activities are having an impact on tobacco-related beliefs, attitudes, and behaviors.

8.1.3. Programmatic Recommendations

8.1.3.1. Tobacco Program

Tobacco Program Programmatic Recommendation 1:

- **Provide more opportunities for local programs to communicate with the State and with each other.**
- **Provide more opportunities for programmatic training and technical assistance.**

Evidence:

1. As reported in Sections 3.1.10.2 and 3.1.11.2, local Tobacco program coordinators feel that they would benefit from having more interaction with other jurisdictions and more communication and guidance from the State.
2. As reported in Section 6.1.2.2, local Tobacco program coordinators feel that they would benefit from receiving more programmatic training and technical assistance from DHMH.

Explanation: Local Tobacco program coordinators value the regional meetings because of the networking opportunities that they provide. They would like more opportunities to network and share experiences with other local Tobacco programs, and to have a mechanism for more frequent communication with the

State and to receive more training in areas such as political advocacy, provision of cessation services, and how to reach hard-to-reach populations. Instituting a website, an email list or listserve, and/or monthly teleconference calls would be inexpensive and effective ways to institute more frequent contact, and guidance and information exchange can also be accomplished through these avenues.

Tobacco Program Programmatic Recommendation 2:

- **Incorporate a statewide countermarketing and media campaign to support the program.**

Evidence:

1. As reported in Section 3.1.4 of this report, the countermarketing and media component of the CRFP was reduced by 95% to \$500,000 after the start of the program. This is well below the CDC recommended funding level of \$5 million.
2. As shown in Section 3.4.1, while tobacco industry promotion and advertising funds continue to increase, Maryland's countermarketing and media component continues to receive funding well below the level recommended by CDC.
3. As indicated in Section 3.1.1.6, smokers were more likely to report awareness of media messages about tobacco than non-smokers.
4. As reported in Section 3.1.2.9, callers to the Maryland Quitline were more likely to have heard about the quitline via media than through any other source.
5. As noted in Section 3.1.11.3, local health officers indicated that State media support will add support to their local Program activities.

Explanation: The statewide countermarketing and media component was a mandated Program component when the statute was written. Due to the reduction in funding, this component has been scaled down significantly. The CDC Best Practices recommendations include the inclusion of a countermarketing and media component to statewide tobacco programs. The data reported in this evaluation indicate that media activities have attracted individuals to call the quitline, and that smokers are more likely to show awareness of media messages about tobacco than nonsmokers. These findings indicate that media messages can be an effective way to reach target populations with messages about risks of tobacco use.

8.1.3.2. Minority Outreach and Participation

Tobacco Program Minority Outreach Recommendation 1:

- **Provide further training and/or technical assistance around outreach to hard-to-find and hard-to-reach populations.**
- **Examine the underserved populations within jurisdictions to determine how best to focus outreach activities.**

Evidence:

1. As reported in Section 3.2.3.2 and 3.2.3.3 of this report, some local Tobacco program coordinators indicated difficulty with minority outreach in their communities due to small proportions of minorities in their jurisdictions. This appears to be especially true for Hispanic/Latino and Native American individuals.

2. As noted in Section 3.2.3.2 of this report, there has been some training on minority outreach provided at regional meetings held by DHMH.

Explanation: Where certain minority populations are very small, local programs have difficulty providing outreach to those minority populations. Creating opportunities for local programs to learn more about how to outreach to particular minority populations will enable the programs to more efficiently and effectively target those populations within their jurisdictions. Examining the particular needs of each jurisdiction will enable the local programs to take a targeted approach to minority outreach in their jurisdictions, rather than diffused approaches, which may not be effective in atmospheres where funding is limited.

Tobacco Program Minority Outreach Recommendation 2:

- **Work with the local Tobacco program coordinators to assist them in better utilizing minority coalition members to outreach to minority communities.**
- **Review hiring practices to ensure that local programs have sufficient minority staff to support minority outreach efforts. Work with local programs to assist them in better utilizing minority staff to provide outreach to minority communities.**

Evidence:

1. As reported in Section 3.2.3.2 and 3.2.3.3 of this report, some local Tobacco program coordinators indicated difficulty with minority outreach in their communities due to small proportions of minorities in their jurisdictions. This appears to be especially true for Hispanic/Latino and Native American individuals.
2. As reported in Section 3.2.3.2, local coalition members are an integral part of community outreach, and provide an important link between the local Tobacco programs and the communities in which they operate.
3. As noted in Section 3.1.10.2 of this report, there has been staff turnover among most local Tobacco programs.

Explanation: Ensuring that local programs utilize the resources they have at hand to assist in minority outreach efforts will enable the programs to take targeted approaches to minority outreach, resulting in more effective and efficient outreach to the minority communities in their jurisdictions.

Tobacco Program Minority Outreach Recommendation 3:

- **Facilitate communication between local Tobacco programs and the MOTA grantees in their jurisdictions.**
- **Ensure that local Tobacco programs understand the State's expectations of the MOTA grantees in their jurisdictions.**
- **Solicit information about local minority outreach needs from local Tobacco programs, and provide that information to the State MOTA staff for consideration when choosing MOTA vendors.**

Evidence:

1. As reported in Section 3.2.2.3 and 3.2.3.2, although many local Tobacco program coordinators indicated that MOTA assists them in recruiting minorities onto their coalitions, some indicated that they do not have a good sense of what their local MOTA program does.
2. As reported in Section 5.1.3.3, the main suggestion made by the local programs was for better communication with and understanding of the MOTA program so that they have a better understanding of the intended function of the MOTA programs in their jurisdictions.

Explanation: State level facilitation of communication between local Tobacco and MOTA programs will help to ensure that the programs understand one another and to establish open lines of communication that will be needed for collaboration. Local Tobacco programs must understand the State level expectations of the MOTA program in order to determine how best to utilize their services and expertise within the MOTA framework. Ensuring that expectations at the local level are aligned with expectations at the State level will help to facilitate local Tobacco programs in determining what services MOTA is required to provide, and what services may require other vendors.

8.1.3.3. Local Tobacco Coalitions

Local Tobacco Coalition Recommendation 1:

- **Provide coalition building trainings and/or workshops to assist the local programs in enhancing coalition recruitment and achieving greater levels of coalition participation and leadership.**
- **Determine which local Tobacco programs are accomplishing these coalition-related goals and set up a mechanism for them to provide peer support to other jurisdictions.**

Evidence:

1. As reported in Section 3.3 of this report, local Tobacco program coordinators indicated that they rely on their coalitions to plan and implement their programs, but they would like for their coalition members to be more active and to take more leadership roles.
2. Also reported in Section 3.3, local Tobacco program coordinators would like to increase coalition membership among individuals who are not receiving funding or associated with stakeholder organizations.

Explanation: Although part of the reason that greater action and leadership is not occurring is due to time constraints, there may be ways to enhance the local coalitions to better support the local program needs. Those programs that are already operating at this more optimal level may be able to provide concrete solutions for other local programs.

8.1.4. Funding Recommendations

Tobacco Program Funding Recommendation 1:

- **Explore ways to decrease the time it takes for funding to be allocated once grant applications have been submitted.**

Evidence:

1. As reported in Sections 3.1.10.2, 3.1.11.2 and 6.1.3.1 of this report, local Tobacco program coordinators feel that the lag in time between the submission of their grant applications and funding awards creates difficulties in maintaining relationships with area providers and in maintaining continuity of program activities.

Explanation: Some options that were suggested by local program coordinators for decreasing the time lag include finding ways to streamline the grant review process and pushing for the legislature to decide their budget at the beginning of the legislative session instead of at the end.

Tobacco Program Funding Recommendation 2:

- **Explore ways to reduce funding fluctuations from year to year.**

Evidence:

1. As reported in Sections 3.1.10.2 and 3.1.11.2, local health officers most commonly identified funding fluctuations as barriers to planning and implementing their local Tobacco programs.

Explanation: According to local Tobacco program coordinators, fluctuations in funding make it difficult for the local programs to maintain staffing, sustain interest among coalition members, and secure subvenders to carry out program implementation. Furthermore, fluctuations in funding make planning difficult, as local programs do not know what resources they will have to work with each year. Reducing this uncertainty will benefit the programs in their planning and assist them to maintain program continuity.

Tobacco Program Funding Recommendation 3:

- **Increase funding for the countermarketing and media component.**

Evidence:

1. As reported in Sections 3.1.1.6, 3.1.2, and 3.4.1 of this report, funding for the countermarketing and media component was cut by 95%.
2. CDC Best Practices recommendation includes a statewide countermarketing and media component to statewide tobacco programs.
3. As indicated in Section 3.1.1.6, smokers were more likely to report awareness of media messages about tobacco than non-smokers.
4. As reported in Section 3.1.2.9, callers to the Maryland Quitline were more likely to have heard about the quitline via media than through any other source.
5. Local health officers (Section 3.1.11.3) and State DHMH Tobacco staff (Section 3.4.2.3) indicated need for a fully funded statewide countermarketing and media component.

Explanation: There is evidence from within the State that the available media is reaching some of the intended target audiences (smokers, and those wishing to quit smoking). The CDC Best Practices recommendations include funding a statewide countermarketing and media component because they have been shown to be effective in promoting prevention and cessation. The countermarketing and media component of the CRFP was cut by 95% after the Program began, and there has been no increase in that

funding over time. Increasing funding will allow the creation and implementation of a countermarketing and media component that can reach a wider audience with targeted messages to enhance the Program's prevention and cessation activities.

Tobacco Program Funding Recommendation 4:

- **Continue to work with local Tobacco programs to determine how they can use their funds to meet local needs while still funding the CDC-recommended elements of community-based, school-based, enforcement, and cessation programs appropriately within their jurisdictions.**

Evidence:

1. As presented in Sections 3.1.10.2 and 3.1.11.2, local Tobacco program coordinators and local health officers indicated that they find the element funding to be too prescriptive, not allowing them to fill gaps that are present in their communities or respond to community needs.
2. As indicated in Section 3.1.11.2 of this report, the State has accommodated requests for changes to the funding formula by increasing the ranges for funding within each element, allowing local programs more flexibility in how they allocate their funding.

Explanation: Tobacco program coordinators feel that less prescriptive funding would allow them to be more responsive to the needs of their communities and to customize their programs according to the available data, coalition suggestions, and community needs. However, the Tobacco Program is designed to follow the CDC Best Practices recommendations, and to do this needs to have an underlying funding structure that provides funding to each of the program elements of community-based, school-based, enforcement, and cessation. The State has relaxed the element funding in the past, but it is unclear whether the local programs found these changes to be beneficial. It may be that the local programs do not fully understand how their program activities fit into each of the elements, and need guidance to determine where activities and interventions fit into the program requirements.

8.1.5. Administration Recommendations

Tobacco Program Administrative Recommendation 1:

- **Utilize conference calls and email to convey emerging data and new tobacco-related information to local programs.**

Evidence:

1. As reported in Sections 3.1.10.2 and 3.1.11.2, local programs feel that they would benefit from having more interaction with the State and with other local Tobacco programs. They would also like to have a mechanism in place by which they can learn about new and emerging research and information that the State learns about.
2. As indicated in Section 6.1.2.2 of this report, local Tobacco program coordinators would like to receive guidance from DHMH regarding science or evidence-based practices to help improve their local programs.

Explanation: Using telephone conference calls and email to convey information to the local Tobacco program coordinators is a low cost way to respond to their need for information.

Tobacco Program Administrative Recommendation 2:

- **Work to restore the benefited positions that have been lost.**
- **Explore the need for more benefited positions to accommodate needs expressed by the State DHMH staff and the Local Tobacco program staff.**

Evidence:

1. As indicated in Section 3.1.10.2 of this report, local Tobacco program coordinators acknowledged that there has been staff turnover at the State level and that the State faces a lack of staff to provide additional training and oversight.
2. As reported in Section 6.1.3.2 of this report, State Tobacco Program staff indicated that they have insufficient overhead funding for staffing.
3. As noted in Section 3.1.10.2 of this report, local programs indicated that the procurement process should move more smoothly to reduce the time lag between application submission and funding.
4. As reported in Sections 6.1.4.1, and 6.1.4.3 of this report, State DHMH Tobacco staff indicated that a main administrative barrier for the Tobacco Program is the procurement process and that inadequate procurement and support personnel causes individual staff to have to take on the work of multiple employees and to work long hours and holidays.

Explanation: State DHMH staff indicated that the lack of funding for staff has resulted in a need to borrow positions for other programs in order to cover basic program needs, and has also resulted in a loss of the community outreach piece of the program. Local Tobacco program coordinators indicated that they would like to have greater levels of oversight, support, and guidance from the State Tobacco Program staff. Without additional staffing, the State will not be able to adequately respond to this need.

8.2. Cancer Program Recommendations

8.2.1. Overview

The recommendations for the Cancer Program are derived from the limitations encountered during this comprehensive evaluation and the suggestions made by the local Cancer program coordinators, local health officers, SAHC staff, and the State DHMH Cancer Program staff. Recommendations are made in the following areas: data collection, monitoring, and evaluation; programmatic issues; funding; legislation; and administration. For each recommendation, the recommendation is given, followed by the evidence for formulating the recommendation, and further explanation of the recommendation.

8.2.2. Data Collection, Monitoring, and Evaluation

8.2.2.1. Data Collection

Cancer Program Data Collection Recommendation 1:

- **Create education outcomes variables that can be used to determine effectiveness of Cancer Program education activities. Collect data on these outcomes measures.**

- **Make question about how individuals heard about the CPEST screenings mandatory in the Cancer Screening and Breast and Cervical Cancer Screening databases and add response options to allow determination of whether CPEST program education was the source of screening program awareness.**

Evidence:

1. As shown in Section 4.1.2 of this report, there have been 531,961 attendees to one-on-one cancer education sessions between 2001 and 2006.
2. As indicated in Section 4.1.2 of this report, Maryland's Cancer Screening Database contains a question regarding how individuals coming in for cancer screenings heard about the program, but this question is optional and the response options in the system do not allow a determination of whether the referring source was part of the CRFP or some other source.
3. As shown in Section 4.1.2 of this report, the Maryland Cancer Survey measured whether Marylanders have heard of FOBT and colonoscopy or sigmoidoscopy in both 2002 and 2004 surveys. Measures of whether Marylanders have heard of the PSA test and an oral cancer screening test were included in the 2002 survey, but not in 2004.
4. As reported in Section 4.2.1.9 and 4.2.1.10 of this report, local Cancer program coordinators and local health officers indicated that their programs have accomplished increases in awareness about cancer and screening in their jurisdictions, and State Program staff feel that the programs have increased the importance and visibility of Cancer issues. Current program measures cannot quantify the extent to which this has occurred due to program activities.
5. As noted in Sections 7.2.2 and 7.2.5 of this report, although Cancer Program performance measures include expectations for volume of education provision, they do not include expected outcomes for education, and state level awareness outcomes are distal and may not be sensitive enough to measure changes in awareness, attitudes, and behaviors that are associated with local education activities.

Explanation: The education database collects a plethora of information about education sessions, but does not allow an examination of the expected education outcomes attached to any given education sessions. For example, some education sessions may be designed to increase awareness of the need for colorectal cancer screenings based on age and risk factors; others may be designed to increase awareness of the availability of no-cost screenings through the local health department. The outcome for the first example might be that people report greater understanding on a post-test; the outcome for the second example might be that more people enter the screening program and report that they entered due to education that they received through the program. With the current data, the only education effectiveness measure that can be examined is the process measure of the number of attendees that have been reached by education messages. If the data collection protocol was enhanced to include projected education outcomes, future evaluations of program effectiveness can go beyond process. Additionally, making the screening database question regarding knowledge of the program a mandatory question, and including a response option(s) to allow a determination of whether education provided by the program was the source of screening program knowledge will help examine direct education outcomes in terms of behaviors.

Cancer Program Data Collection Recommendation 2:

- **Collect data about the number of individuals that request but do not receive screening under the Cancer Program. Record the reason for refusals as well as recommendations or referrals to other screening sources.**

Evidence:

1. As reported in Section 4.1.5.1 of this report, local Cancer program coordinators and local health officers indicated concern that due to funding limitations, their programs cannot keep up with the screening needs in their jurisdictions.
2. The Cancer Program currently does not collect data about individuals that are turned away from the program due to lack of funds to provide services.

Explanation: Although anecdotally, the local programs indicate that at times they cannot keep up with screening demands, the Program has no way of quantifying these gaps in service provision. Furthermore, the Program has no way of determining whether a lack of screening funds results in no services to the individual in need, if the services are provided through some other mechanism, or if the services are delayed until the next funding cycle. Collecting this data will allow the Program to better assess where screening funding enhancements would provide the greatest benefits.

Cancer Program Data Collection Recommendation 3:

- **Collect data that will allow the Cancer Program to examine the relative costs and expenses for the education, screening, diagnosis, and treatment services being provided by the local programs at the individual or activity level.**

Evidence:

1. The Cancer Program requested that the evaluation team provide an examination of cost per person served under the cancer program as part of the evaluation. The evaluation team experienced a barrier to providing this information in that the data available from local Cancer program budgets and budget reconciliations do not provide details at the level of granularity needed to conduct such an analysis.
2. As indicated in Section 4.1.2.2 of this report, funding fluctuations may have differential affects on screening and education activities at the local level. If costs per activity are known, the State and the local programs can use budget information to assist in strategic planning and performance setting more precisely.
3. As indicated in Sections 4.1.5.2, 4.4.1.2, and 4.4.3.3 of this report, funding issues are important from both the local Cancer program and State Cancer Program levels. Specifically, it was indicated that some local programs have difficulty keeping up with the screening demands in their jurisdictions due to lack of funds, and that many local programs cannot provide treatment services for individuals who are diagnosed with cancer due to screening activities provided under the CRF Cancer Program. The depth of this issue is difficult to quantify with the current available budget information.

Explanation: The impact of funding fluctuations, funding cuts, or funding increases on provision of services and priority setting can only be broadly examined with the current data systems. Collecting more detailed expenditures data will allow the program to specifically examine and explain how funding

changes directly affect the different elements of the local Cancer programs. It will also allow the program to determine the costs per person served by provider and/or jurisdiction, as needed.

Cancer Program Data Collection Recommendation 4:

- **Explore ways to reduce count duplications of one-on-one cancer education provision counts in the Cancer Education Database.**

Evidence:

1. As noted in Section 7.2.3 of this report, currently, the Cancer Education Database provides an estimate of the number of attendees at one-on-one cancer education sessions. However, it is unclear how this figure relates to the number of individuals who have been exposed to cancer education under the program.
2. Outcomes measures are likely to depend not only on the number of individuals who have been engaged and educated (reach), but also the number of times that individuals are engaged and educated (depth).

Explanation: To the degree that it is important to know how many individuals have been reached through program education activities, the data collection through the cancer education database should aim to control count duplications. This can be accomplished through a front-end change in how education sessions information is collected – that is, individual sessions that cover multiple cancers can be identified as single sessions, individuals who attend multiple education sessions can be identified as single individuals with multiple sessions; and at the back end, when data is downloaded from the system, through filtering counts based on whether participant attendance at single session covering multiple topics, or at multiple sessions covering single topics.

Cancer Program Data Collection Recommendation 5:

- **Implement an annual Coalition Members Survey.**

Evidence:

1. The statute mandates that under the local health component of the CRFP, community health coalitions should be empowered to develop and implement the CPEST programs in coordination with their health departments. Additionally, each year the community health coalition will work with their local health departments to update annual CPEST plans.
2. As evidenced by the inclusion of the questions in Section 4.3 for the comprehensive evaluation, the Department is interested in examining how well the community health coalitions are working in their jurisdictions, and the extent to which coalition members are active in planning, developing, and implementing the local programs.
3. As indicated in Section 4.1.5.2, difficulties in developing and maintaining an active coalition are a program barrier for some local Cancer programs.
4. As indicated in the Limitations Section of this report, response rate to the Coalition Members Survey fielded for this Comprehensive Evaluation was rather low, and did not allow for an examination of coalition member differences between jurisdictions. While the reasons for the low response rate are not clear, making the survey participation a standard portion of annual coalition membership renewal is likely to increase the response rate.

Explanation: An annual Coalition Members Survey can be incorporated into the annual coalition members' renewal process. Increased survey response rates will allow an examination of coalition differences between jurisdictions. With regular collection of this data, changes in coalitions can also be tracked over time. The Department and the local Cancer programs can include questions of interest on the survey to assist in maintaining and developing coalitions that are effective and efficient and serve the Program needs.

8.2.2.2. *Monitoring*

Cancer Program Monitoring Recommendation 1:

- **Revise annual local program performance targets according to actual annual budgets, and monitor local progress toward those targets.**
- **Link annual local program performance targets to State level annual goals and expectations (and assist local programs in creating performance targets that feed into the State level goals and expectations).**
- **Provide periodic feedback to local programs regarding their progress toward meeting their annual performance targets. Work with the local programs to determine what feedback information would be most useful for them.**
- **Utilize the data from the Cancer screening and education databases to provide performance feedback.**

Evidence:

1. As mentioned in the limitations section of this report, there is currently no mechanism for monitoring the degree to which local programs are achieving their annual performance measures. This is because the goals that are set in the local grant applications are based on expected funding, and are not updated once actual funding levels are announced.
2. Currently the statewide Program goals that are set in the annual MFR reports do not set annual goals for every type of screening that is provided through the local programs nor for education activities through the local programs.
3. Links between the statewide annual expectations and goals and local level annual expectations and goals are not evident.
4. As reported in Section 4.1.5.2 of this report, some local Cancer program coordinators do not see the value in reporting the volume of data required for the local education and screening activities databases.
5. As reported in Section 4.1.6.2 of this report, some local Cancer program coordinators expressed the need for a clear statement of the goals for the program, including specification of the local goals as well as the overarching statewide goals to be considered and addressed, and how the statewide goals can be addressed while still allowing for flexibility at the local level. Additionally, they would like to receive information about how their programs are doing with respect to meeting these goals.

Explanation: Although the programs are administered at the local level, measurable goals are set solely at the statewide level. To determine what changes should be made to the programs, it is important to

determine how it is working at the level at which it is administered – this is where any programmatic shifts would be made for improvement and enhancement. Setting annual statewide goals to determine program effectiveness should be done with each program element and with local performance expectations in mind, and the links between statewide goals and local performance expectations should be made explicit. By using the data that is submitted in the education and screening databases to enhance program monitoring, and to support programmatic recommendations at the local level, the utility of the data collected and reported in may be more evident to the local Cancer program coordinators. Although the Department currently provides feedback to the local programs three times per year, locals indicated that they would like to receive feedback about how they are progressing in meeting their annual targets and contributing to the statewide annual goals.

8.2.2.3. Evaluation

Cancer Program Evaluation Recommendation 1:

- **Implement regular Program evaluations (annual or biannual).**
- **Determine areas of interest from the current Comprehensive Evaluation for more in-depth examination to incorporate greater depth in on-going Program evaluations.**

Evidence:

1. Although the Surveillance and Evaluation Unit provides Annual Cancer Reports, collects and reports on the Maryland Cancer Survey every two years, and performs periodic specialized data collection and reporting, this Comprehensive Evaluation is the first evaluation of the Program to be done since its inception.
2. Due to the scope of the evaluation, both in terms of questions to be addressed and the period of performance under review, a broad examination of the CRFP Cancer Program from a statewide perspective was performed, but in-depth examinations of each question were not possible.

Explanation: Regular Program evaluations will allow the Program to examine trends as they occur. Regular evaluations will allow the Program to determine where there are needs for programmatic changes and enable consistent examinations of how adjustments to the Program affect outcomes.

Cancer Program Evaluation Recommendation 2:

- **Include a local evaluation component that includes local program goals, expected outputs and outcomes, and an evaluation plan to measure progress toward local goals in local Cancer plans.**

Evidence:

1. The structure of the CRFP is for planning and implementation to occur at the local level.
2. This Comprehensive Evaluation, while examining processes at the local level, examines progress at the statewide level, based on State level outcomes expectations.
3. As reported in Section 4.1.6.2 of this report, some local Cancer program coordinators expressed the need for a clear statement of the goals for the program, including specification of the local goals as well as the overarching statewide goals to be considered and addressed, and how the statewide goals can be addressed while still allowing for flexibility at the local level.

Explanation: Local evaluation components could either be carried out by the local programs (assuming evaluation funding is available to do so), or could be incorporated into annual or biannual comprehensive evaluations. With local program level process and outcomes goals, measures can be created to determine the extent to which local program activities are working as intended and how the local activities are contributing to accomplishment of statewide goals.

8.2.3. Programmatic Recommendations

8.2.3.1. Local Cancer Programs

Cancer Program Programmatic Recommendation 1:

- **Explore options for incorporating funding to allow for greater treatment services to be incorporated into the Program.**

Evidence:

1. As reported in Sections 4.1.5.2, 4.1.6.2, 4.2.2.2, 4.4.1.2, 4.4.3.2, and 4.4.4.2 of this report, a consistent theme that emerged throughout the in-depth interviews with local Cancer program coordinators and local health officers was a need for a means to support treatment through the Program.
2. Due to the scope of the evaluation, both in terms of questions to be addressed and the period of performance under review, a broad examination of the CRFP Cancer Program from a statewide perspective was performed, but in-depth examinations of each question were not possible.

Explanation: Local Cancer program coordinators, local health officers, and State Cancer Program staff provided some suggestions for ways to incorporate treatment funds into the Program. This evaluation does not permit a determination of the most feasible options, but does provide some suggestions for exploration of this issue.

Cancer Program Programmatic Recommendation 2:

- **Continue to work with local Cancer programs to make the Cancer education and screening databases more usable and useful to the local programs.**

Evidence:

1. As reported in Section 4.1.5.2, local Cancer program coordinators indicated that having to track multiple data reporting systems for Cancer program activities is seen as an obstacle.
2. As reported in Section 4.1.5.2 of this report, some local Cancer program coordinators do not see the value in reporting the volume of data required for the local education and screening activities.
3. The Cancer Program recently enhanced the Cancer education and screening databases in response to issues raised by local programs.

Explanation: Continuing to work with the local programs to enhance the databases will result in better usability and utility of the databases. Local health officers suggested that integration of data collection into a single reporting system could ease the local reporting burden. Although this evaluation cannot determine whether this is a feasible option, it provides one option for exploration. Finding ways to simplify reporting requirements will help to decrease the perceived burden of data reporting at the local level.

8.2.3.2. *Minority Outreach and Participation*

Cancer Program Minority Outreach Recommendation 1:

- **Provide further training and/or technical assistance around outreach to hard-to-find and hard-to-reach populations.**
- **Examine the underserved populations within jurisdictions to determine how best to focus outreach activities.**

Evidence:

1. As reported in Section 4.2 of this report, local Cancer program coordinators, particularly those in small jurisdictions, indicated difficulty with the minority outreach requirements for their programs, due to a lack of particular minority representation in their communities.

Explanation: Where certain minority populations are very small, local programs feel that a disproportionate amount of funding must be used to outreach and provide services to those populations. As a result, they recommended that the State make a shift in how it views “minorities.” They recommend broadening the scope of what comprises a minority to include cultural minorities, gay and lesbian populations, and other underserved individuals (that may be determined by locality) to enhance the Program’s reach to better serve the needs within each jurisdiction.

Cancer Program Minority Outreach Recommendation 2:

- **Facilitate communication between local Cancer programs and the MOTA grantees in their jurisdictions.**
- **Ensure that local Cancer programs understand the State’s expectations of the MOTA grantees in their jurisdictions.**
- **Solicit information about local minority outreach needs from local Cancer programs, and provide that information to the State MOTA staff for consideration when choosing MOTA vendors.**

Evidence:

1. As reported in Section 4.1.5.2, local programs have varied experiences with the MOTA vendors in their jurisdictions. In some jurisdictions, MOTA is viewed as an important outreach facilitator, while in others MOTA is not seen as a value added program.
2. As reported in Section 4.2.2.3, satisfaction with MOTA activities to enhance outreach at the local level is mixed with some indicating that MOTA assists with recruiting and maintaining minority representation on coalitions, as well as staging and implementing outreach activities, and others indicating that MOTA does not assist with minority outreach in their jurisdictions.
3. As reported in Section 4.2.3.3, DHMH CRFP staff suggested that coordinating needs and expectations between local programs and MOTA could help enhance outreach.
4. As reported in Section 5.1.3.3, the main suggestion made by the local programs was for better communication with and understanding of the MOTA program so that they have a better understanding of the intended function of the MOTA programs in their jurisdictions.

Explanation: State level facilitation of communication between local Cancer and MOTA programs will help to ensure that the programs understand one another and to establish open lines of communication that will be needed for collaboration. Local Cancer programs must understand the State level expectations of the MOTA program in order to determine how best to utilize their services and expertise within the MOTA framework. Ensuring that expectations at the local level are aligned with expectations at the State level will help to facilitate local Cancer programs in determining what services MOTA is required to provide, and what services may require other vendors.

Cancer Program Minority Outreach Recommendation 3:

- **Work with the local Cancer program coordinators to assist them in better utilizing minority coalition members to outreach to minority communities.**
- **Review hiring practices to ensure that local programs have sufficient minority staff to support minority outreach efforts.**
- **Work with local programs to assist them in better utilizing minority staff to provide outreach to minority communities.**

Evidence:

1. As reported in Section 4.2 of this report, some local Cancer program coordinators indicated difficulty with minority outreach in their communities due to small proportions of minorities in their jurisdictions. This appears to be especially true for Hispanic/Latino and Native American individuals.
2. As reported in Section 4.2 of this report, local Cancer program coordinators feel that their coalitions could do more to assist in outreaching to minority communities.
3. As noted in Section 4.1.5.2 of this report, there has been staff turnover among most local Cancer programs.

Explanation: Ensuring that local programs utilize the resources they have at hand to assist in minority outreach efforts will enable the programs to take targeted approaches to minority outreach, resulting in more effective and efficient outreach to the minority communities in their jurisdictions.

8.2.3.3. Local Cancer Coalitions

Local Cancer Coalition Recommendation 1:

- **Provide coalition building trainings and/or workshops to assist the local programs in enhancing coalition recruitment and achieving greater levels of coalition participation and leadership.**
- **Determine which local Cancer programs are accomplishing these coalition-related goals and set up a mechanism for them to provide peer support to other jurisdictions.**

Evidence:

1. As reported in Section 4.3 of this report, local Cancer program coordinators expressed the need for their coalition members to be more active and to take more leadership roles.
2. Also reported in Section 4.3, local Cancer program coordinators would like to increase coalition membership among individuals who are not receiving funding or associated with stakeholder organizations.

Explanation: Although part of the reason that greater action and leadership is not occurring is due to time constraints, there may be ways to enhance the local coalitions to better support the local program needs. Those programs that are already operating at this more optimal level may be able to provide concrete solutions for other local programs.

8.2.3.4. Statewide Academic Health Centers

SAHC Recommendation 1:

- **Work with the SAHCs to determine their communication needs and how best to fulfill those needs.**

Evidence:

1. As reported in Section 4.5.4.4 of this report, some SAHC Grant program staff indicated that they would like to have more interaction with DHMH, including more advisory and statistical support.

Explanation: The advisory and statistical support required by the SAHCs may be something that can be provided from within DHMH, but there may be a need to find outside support. The first step to determining how best to serve these needs will be through communication between DHMH and the SAHCs to identify the nature of their support needs.

SAHC Recommendation 2:

- **Explore the feasibility of supporting an expansion of the scope of the grants, and how such an expansion would affect the abilities of the SAHCs to continue to provide research in accordance with the statute.**

Evidence:

1. As reported in Section 4.5.4.4 of this report, SAHC Grant Program staff indicated that they would like to expand the scope of the grants to allow for funding research beyond cancer, such as issues related to tobacco, research on populations with multiple chronic diseases, and/or on cancer survivors and exposures.
2. The statute indicates that the Cancer research grants are to be use to enhance cancer research activities that may lead to a cure for a targeted cancer and to increase the rate at which cancer research activities are translated into treatment protocols in the state

Explanation: The feasibility of expanding the scope of the research grants is needed before any recommendation to move forward with the SAHC suggestion can be made.

8.2.4. Funding Recommendations

8.2.4.1. Local Cancer Programs

Funding Local Cancer Programs Recommendation 1:

- **Examine waiting lists to determine the level of need for extra screening funds within jurisdictions.**
- **Examine re-screening efforts within jurisdictions to determine the extent to which new funds must be moved away from provision of new screenings to provision of re-screening.**

- **Once the level of need for increased screening funds is examined and understood, work to help secure increased funds for jurisdictions that are not able to meet their screening needs.**

Evidence:

1. As reported in Section 4.1.5.2 of this report, local Cancer program coordinators indicated that there is often not enough funding to support the number of screenings requested in their jurisdictions.
2. As reported in Section 4.1.5.2 of this report, local Cancer program coordinators and local health officers expressed concern that as local screening efforts detect abnormal findings, funds must be earmarked for required repeat screenings, resulting in fewer funds available for new screenings.

Explanation: According to the local Program coordinators and local health officers, current funding levels do not support the screening demands in many of the jurisdictions. If this is the case, funding levels for the local Cancer programs should be increased to meet these needs. However, before the extent of this increase can be determined, the screening needs should be assessed through an examination of the number of individuals who seek screening through the local programs, and the number of individuals who actually receive screening through the program. This can be done, in part, by reviewing the waiting lists for local screening services.

Because local programs are required to re-screen individuals who have suspicious findings in any screening, annual funding formulae for the local Programs should take into account the level of re-screening need within each jurisdiction, and adjust funding accordingly. The level funding that has been provided over the past few years has not made this provision, meaning that as re-screening needs increase, new services decrease.

Funding Local Cancer Programs Recommendation 2:

- **Examine the need for treatment funding due to cancers that have been detected through local screening activities.**
- **Consider the feasibility of options such as consolidating the unobligated annual CRFP allocations to create a statewide fund for access by jurisdictions as needed, securing dedicated treatment funds, and tapping into other funding sources such as Medicare and Medicaid.**

Evidence:

1. As reported in Sections 4.1.5.2 and 4.1.6.2 of this report, local Cancer program coordinators and local health officers expressed concern that there is currently no mechanism within CRFP to provide funding for treatment of cancers that are detected through the screening program, while still allowing screening activities to continue at their current rate.

Explanation: Due to the widespread concern about the lack of treatment funding, it is recommended that some mechanism be put in place to provide treatment funds to local Programs. This funding mechanism can either be incorporated into annual funding for local programs, or be a statewide source of funding to be drawn from as needed by local programs. Coordinators who suggested that the CRFP make an attempt to identify a means to fund treatment services expressed a concern that the program currently has no solid options to provide treatment in the event active cancer is identified. They point to the breast and cervical cancer program that has dedicated treatment funds available, but several have suggested that perhaps the CRFP could consider consolidating the unobligated annual CRFP allocations to create a statewide fund that each jurisdiction could access when an individual with lacking resources is identified with cancer and treatment is needed.

Funding Local Cancer Programs Recommendation 3:

- **Explore ways to decrease the time it takes for funding to be allocated once grant applications have been submitted.**

Evidence:

1. As reported in Sections 4.4.4.2 and 6.1.3.1 of this report, local Cancer program coordinators feel that the lag in time between the submission of their grant applications and funding awards creates difficulties in maintaining relationships with area providers and in maintaining continuity of program activities.

Explanation: Some options that were suggested by local program coordinators for decreasing the time lag include finding ways to streamline the grant review process and pushing for the legislature to decide their budget at the beginning of the legislative session instead of at the end.

8.2.4.2. Statewide Academic Health Centers

Funding Statewide Academic Health Centers Recommendation 1:

- **Examine the feasibility of providing a mechanism to allow for carryover of funds across periods of performance to enable projects that experienced lags in start-up to continue without interruption.**

Evidence:

1. As reported in Section 4.5.4.3 of this report, one of the barriers to performance indicated by the SAHC staff is the length of time that it takes to get research studies started up and completed.
2. Currently, unused funds must be returned annually.

Explanation: Lags in startup time for research projects may result in lags in expenditures related to those projects. However, if funding that was set aside for such projects becomes unavailable, the time and money spent on startup may be wasted. Allowing carryover of funds across periods of performance may reduce waste by allowing continuity of projects once they have been set up.

8.2.5. Legislation Recommendations

Cancer Program Legislative Recommendation 1:

- **Explore alternatives to the requirement that unspent local funds must be returned annually.**

Evidence:

1. As reported in Section 4.1.5.2 of this report, local Cancer program coordinators indicated that there is often not enough funding to support the number of screenings requested in their jurisdictions.
2. As reported in Sections 4.1.5.2 and 4.1.6.2 of this report, local Cancer program coordinators and local health officers expressed concern that there is currently no mechanism within CRFP to

provide funding for treatment of cancers that are detected through the screening program, while still allowing screening activities to continue at their current rate.

3. As reported in Section 4.5.4.3 of this report, one of the barriers to performance indicated by the SAHC staff is the length of time that it takes to get research studies started up and completed.

Explanation: State CRFP Cancer staff suggested that the option to move funds between jurisdictions be explored. A starting point for this exploration would be finding ways to move unused funds being returned by one jurisdiction to other jurisdictions that lack funds to supply screening services to individuals on waiting lists. Similarly, funds that would ordinarily be returned at the end of the year may be a good source for creating a pot of money for provision of treatment services to individuals for whom cancer is detected as a result of Program screening activities.

8.2.6. Administration Recommendations

Cancer Program Administrative Recommendation 1:

- **Make the Cancer education and screening database data more relevant to the local Cancer programs by instituting database-driven progress reports. Include details beyond the number of people educated or screened in progress reports for the local programs – utilize the details collected from them to feed back information about their programs.**
- **Continue collecting data via the Cancer education and screening databases.**

Evidence:

1. As reported in Section 4.1.5.2 of this report, local Cancer program coordinators find the reporting requirements, particularly for the Cancer Education Database to be time consuming and excessive. Local health officers agreed that data reporting requirements for the Cancer program are high.
2. As reported in Section 4.2.6.2 and 6.1.5.3, it was suggested that if the reporting requirements for all program aspects were integrated into a single reporting system, it might ease the reporting burden.
3. As reported in Section 4.1.5.2 of this report, Cancer program coordinators find reporting activities into the Cancer Education Database to be time consuming, and that the information that is gleaned from the database relative to the time taken to enter data into it is minimal from their perspective.
4. As reported in Section 4.1.6.2 of this report, some local Cancer program coordinators expressed the need for a clear statement of the goals for the program, including specification of the local goals as well as the overarching statewide goals to be considered and addressed, and how the statewide goals can be addressed while still allowing for flexibility at the local level. Additionally, they would like to receive information about how their programs are doing with respect to meeting these goals.
5. The evaluation team working on this Comprehensive Evaluation found that the data in the screening and education databases are an important tool for continued Cancer Program evaluation.

Explanation: Although the local Cancer program coordinators indicated that they would like to see a reduction in the data reporting requirements, they also indicated that the amount of work that is required to input data into the Cancer Education Database is greater than would be expected, given what they get out of the data. It is important for programs to feel that the data they provide is useful not only to the State, but to their local programs, as well. By using the data collected in all of the Cancer databases to update the programs about their individual performance, the data will become more pertinent to them. Because there is a large volume of data collected in the databases, exploring ways to incorporate not just the number of people educated, but other database variables into progress reports will make the need for the volume of data collected more concrete to the local programs.

Cancer Program Administrative Recommendation 2:

- **Work to restore the benefited positions that were lost recently.**
- **Explore the need for more benefited positions to accommodate needs expressed by the State DHMH staff and the SAHC Grant program staff.**

Evidence:

1. As reported in Section 6.1.4.3 of this report, State DHMH Cancer Program staff identified personnel issues, such as turnover and loss of PINS as barriers to administration of the program.
2. As reported in Section 4.5.4.4 of this report, some SAHC Grant program staff indicated that they would like to have more interaction with DHMH, including more advisory and statistical support.

Explanation:

State DHMH staff indicated that the loss of PINS has resulted in extended vacancies, staff overload, and the inability to hire people who are experienced, stable, and want the available jobs.

8.3. MOTA Program Recommendations

8.3.1. Overview

The recommendations for the MOTA Program are derived from the limitations encountered during this comprehensive evaluation and the suggestions made by the local MOTA grantees, local Tobacco and Cancer program coordinators, and the State DHMH MOTA Program staff. Recommendations are made in the following areas: data collection, monitoring, and evaluation; programmatic issues; funding; and administration. For each recommendation, the recommendation is presented, followed by the evidence for the recommendation, and an explanation providing more detail.

8.3.2. Data Collection, Monitoring, and Evaluation

8.3.2.1. Data Collection

MOTA Program Data Collection Recommendation 1:

- **Create performance targets for MOTA that specifically measure the extent to which MOTA programs are providing outreach and other support and assistance to the local CRF Tobacco and Cancer programs in their jurisdictions.**

Evidence:

1. As evidenced in Section 5.1.1 of this report, MOTA performance goals include coalition building, education/infrastructure and capacity building, and resource development.
2. As reported in Section 5.1.1.5 of this report, the MOTA goals that can be directly connected to the CRFP Tobacco and Cancer programs include recruiting members for and attending local CRFP Tobacco and Cancer coalition meetings.
3. Although other MOTA program activities may be related to Tobacco and or Cancer, there is no explicit link made to the CRFP Tobacco and Cancer programs in other MOTA performance targets.
4. As reported in Sections 3.2.2.3 and 4.2.2.3, some local Tobacco and Cancer program coordinators do not have a clear understanding of how best to work with the MOTA programs to provide minority outreach in their jurisdictions.

Explanation: Creating performance targets that link to the CRFP Tobacco and Cancer Programs will not only enable the Program to track progress toward meeting minority outreach goals in the community, but will also help to enhance the understanding of the MOTA program by local Tobacco and Cancer program coordinators, and enable better collaboration based on this understanding.

MOTA Program Data Collection Recommendation 2:

- **Develop and collect data on observable outcome measures associated with program activities for the MOTA program.**

Evidence:

1. Currently, the MOTA program collects quantitative data reports that primarily measure process variables, such as the number of events that were held and the number of people attending events; and qualitative data reports via narratives that describe events in more detail.
2. As evidenced by the data reported in Section 5.1.1 and discussed in Section 7.3.3 of this report, quantitative outcome measures are not currently being collected to determine the effectiveness of activities and interventions.

Explanation: Because the current quantitative data collection for the MOTA programs only allows an examination of the number of activities being performed, there are no clear outcomes goals associated with most of the process measures. For example, the programs measure the number of outreach activities that they attend or conduct, but there is no indication of what the expected outcomes associated with these outreach activities should be, and whether these outcomes are being achieved.

MOTA Program Data Collection Recommendation 3:

- **Create MFR Goals to be measured at the State level.**

Evidence:

1. Currently, the local programs set some annual process goals for their programs. However, MFR reports submitted by the State do not contain measures for the MOTA program.

Explanation: MFRs are designed to support the customer focus of State funded programs, and MOTA's purpose is to provide services and outreach to underserved populations. Creating MFR goals and objectives for the MOTA program will allow the MOTA program to track progress toward statewide goals and objectives.

8.3.2.2. Monitoring

MOTA Program Monitoring Recommendation 1:

- **Standardize the MOTA performance measures. Ensure that the standard definitions are used by all MOTA grantees when reporting their activities.**

Evidence:

1. As reported in Section 5.1.2 and discussed in Section 7.3.2 of this report, each MOTA grantee is required to list the activities in which they engaged, as related to the performance measures of the program. However, it is not clear how or whether the performance measures have been given standard, operational definitions.

Explanation: Some examples of data definitions that are difficult to distinguish are as follows: MOTA programs indicated that they sponsored an event, and others indicated that they hosted an event. It is not clear whether sponsoring and hosting an event means the same thing. In the data collection protocol, MOTA grantees must list the outreach events that they conducted or attended. The resulting number is a combined account. However, it is not clear what event attendance means – for some, it may mean simply being in attendance; for others, it may mean hosting a booth or a presentation. Providing clear, standardized definitions of data elements will enable programs to provide consistent reporting across programs.

MOTA Program Monitoring Recommendation 2:

- **Create a database for collecting MOTA grantee activities and outcome data.**

Evidence:

1. As indicated in Section 7.3.2 of this report, topics of events, event locations, audience (for example: youth, church-members, community leaders) are collected in the narrative reports, but are not collected in or linked with the quantitative activities reports.
2. As reported in Section 5.1.2.4 of this report, some MOTA programs find the amount of paperwork and reporting required by the Program to be excessive.
3. Creating a database to allow detailed data to be collected and linked will assist the Program in its ability to collect and link process and outcome data.

Explanation: Creating a database for collecting the MOTA grantee data will streamline the data collection process, and may help local MOTA programs to organize and simplify their data reporting activities. Even a simple access database with associated data entry forms can help to build a database to examine program activities and outcomes across grantees, jurisdictions, and time. It is recommended that data collection forms and an associated database be developed once the data elements have been identified, defined, and operationalized. Programs' progress toward their goals should be monitored on an ongoing basis, with feedback to the local programs that allows them to examine where there are relative to

achieving their annual performance goals, and to plan how to proceed with their program activities accordingly.

8.3.2.3. Evaluation

MOTA Program Evaluation Recommendation 1:

- **Implement regular Program evaluations (annual or biannual).**
- **Determine areas of interest from the current Comprehensive Evaluation for more in-depth examination to incorporate greater depth in on-going Program evaluations.**

Evidence:

1. Although the MOTA program provides reports on the annual accomplishments of MOTA, this Comprehensive Evaluation is the first evaluation of the Program to be done since its inception.
2. Due to the scope of the evaluation, both in terms of questions to be addressed and the period of performance under review, a broad examination of the CRFP MOTA Program from a statewide perspective was performed, but in-depth examinations of each question were not possible.

Explanation: Regular Program evaluations will allow the Program to examine trends as they occur. Regular evaluations will allow the Program to determine where there are needs for programmatic changes and enable consistent examinations of how adjustments to the Program affect outcomes.

MOTA Program Evaluation Recommendation 2: Evidence:

- **Include a local evaluation component that includes local program goals, expected outputs and outcomes, and an evaluation plan to measure progress toward local goals in local MOTA plans.**

Evidence:

1. There have been no MFR goals established for the MOTA program in the past.
2. Although there are performance goals established for each local MOTA program, these goals are primarily process oriented, with very few outcome oriented goals established and measured.

Explanation: Local MOTA programs have individual goals based on the needs of the jurisdictions within which they operate. Some of the goals may be connected to the operation of the local Tobacco and Cancer programs, other goals may be standalone goals of the individual MOTA grantees. Observable local program outcomes should be developed for the MOTA program, with overarching goals that can be reported on by all MOTA programs, as well as local goals that may be shared by only a few of the MOTA programs. Statewide process and outcomes measures should be created for the MOTA program, with the local level goals in mind.

8.3.3. Programmatic Recommendations

MOTA Program Programmatic Recommendation 1:

- **Facilitate communication between local Tobacco and Cancer programs and the MOTA grantees in their jurisdictions.**
- **Ensure that local Tobacco and Cancer programs understand the State's expectations of the MOTA grantees in their jurisdictions.**
- **Solicit information about local minority outreach needs from local Tobacco and Cancer programs, and provide that information to the State MOTA staff for consideration when choosing MOTA vendors.**

Evidence:

1. As reported in Section and 4.2.2.3, local Cancer program satisfaction with MOTA activities to enhance outreach at the local level is mixed with some indicating that MOTA assists with recruiting and maintaining minority representation on coalitions, as well as staging and implementing outreach activities, and others indicating that MOTA does not assist with minority outreach in their jurisdictions.
2. As reported in Sections 3.2.2.3 and 4.2.3.3, DHMH CRFP Tobacco and Cancer staff suggested that coordinating needs and expectations between local programs and MOTA could help enhance outreach.
3. As reported in Section 5.1.3.3, the main suggestion made by the local programs was for better communication with and understanding of the MOTA program so that they have a better understanding of the intended function of the MOTA programs in their jurisdictions.

Explanation: Some of the local Tobacco and Cancer programs do not have a satisfactory understanding of the purpose of the MOTA program and how the programs can work together to enhance minority outreach and participation in their communities. If the State makes an effort to inform the local Tobacco and Cancer programs about the State level expectations of the MOTA programs that operate in their jurisdictions, and to encourage and act as a conduit for communication between the local Tobacco and Cancer programs and MOTA programs this will facilitate cooperation.

MOTA Program Programmatic Recommendation 2:

- **Encourage local Tobacco, Cancer and MOTA programs to continue to work together to establish meeting times that are more conducive to participation.**

Evidence:

1. As reported in Section 5.1.2.2, MOTA grantees have some difficulties attending Tobacco and Cancer coalition meetings because the meeting times do not accommodate their schedules.

Explanation: MOTA grantees indicated that they have difficulty attending coalition meetings during the times that they are held. If MOTA programs provide their local Tobacco and Cancer programs with the times that they would be available to attend coalition meetings, the coordinators can consider these options when determining what meeting times are best for the coalition as a whole.

MOTA Program Programmatic Recommendation 3:

- **Provide further training and/or technical assistance around outreach to hard-to-find and hard-to-reach populations.**

Evidence:

1. As reported in Section 5.1.2.4 of this report, one barrier to the MOTA program is that they have difficulty identifying and accessing minorities in their communities.

Explanation: DHMH has been proactive in providing training opportunities around minority outreach. Continued training and technical assistance that are targeted toward the jurisdictions in which difficulties in minority outreach are being encountered may help MOTA programs to overcome this barrier. Additionally, identifying minorities within the populations that are considered most difficult to reach who can provide trainings will enhance the effectiveness of training activities.

8.3.4. Funding Recommendations

MOTA Program Funding Recommendation 1:

- **Examine staffing needs for local MOTA programs to determine the extent of the funding need.**
- **Work with MOTA grantees to examine whether current funding can be used more efficiently.**
- **Determine whether additional funding can be made available to the MOTA program if needed.**

Evidence:

1. As reported in Section 5.1.2.4 of this report, local MOTA grantees indicated that funding limitations were the most often stated program implementation barrier. Specifically, lack of funding to hire and retain qualified personnel was an issue mentioned by many MOTA grantees.

Explanation: According to the local Program coordinators and local health officers, current funding levels do not support the staffing needs of the programs. The degree of the problem must be examined before a solution can be devised. Once the depth of the funding problem is understood, the Program can work to determine whether additional funding can be made available to the MOTA program, and/or whether current funding can be allocated more efficiently within the MOTA programs to better address staffing and other needs.

8.2.6. Administration Recommendations

MOTA Program Administrative Recommendation 1:

- **Provide dedicated State-level staff to oversee and administer the MOTA Program.**

Evidence:

1. As reported in Section 5.1.1.2 of this report, the MOTA Program has gone from four grantees in 2001 to 17 grantees in 2006.
2. Although there has been an increase in the number of grantees under the MOTA Program, there has been no allocation of dedicated staff or increase in staff, to oversee the program at the State level.

Explanation: With more MOTA grantees, there is an increased workload for choosing, overseeing, and advising the Program. State MOTA staff suggested that dedicated staff should be provided to support the Program. Also, providing additional staff to support dedicated MOTA Program staff that is MOTA Program staff, or they could be minority outreach staff that work with the Tobacco, Cancer and MOTA programs can help to provide a holistic approach to administration of the program.

MOTA Program Administrative Recommendation 2:

- **Implement monthly or quarterly MOTA conference calls to enable programs to share information and experiences.**
- **Determine whether MOTA grantees would find benefit in having a list-serve or email list, and put one in place if warranted.**
- **Continue to look for opportunities for MOTA grantees to share experiences with and learn from non-MOTA minority outreach providers.**

Evidence:

1. As indicated in Section 5.1.3.2 of this report, MOTA grant coordinators suggested the need for more opportunities to interact and network with one another to learn about successful strategies and how to overcome barriers.
2. DHMH holds an annual Health Disparities Conference during which programs can learn about outreach and current issues.

Explanation: Monthly or quarterly conference calls that involve all of the MOTA grantees will give them and opportunity to share with one another without incurring travel costs. Implementing a list-serve or email list on which MOTA grantees can share information and suggestions is a low-cost way to encourage and enable communication and networking. In addition to the annual Health Disparities Conference, MOTA grantees indicated a desire to learn and garner ideas from programs that have been successful in conducting minority outreach.

Appendix A: Tobacco Coordinator, Cancer Coordinator, MOTA Grantee, and Coalition Member Survey Results Tables

Table A-1. Demographic Characteristics of Coalition Members Survey Respondents

Jurisdiction	Total N	Tobacco	Cancer	Female	Male	Youth	Minority	Hispanic	African American	Asian	Native American	White
Allegany County	28	21	10	24	4	0	1	0	1	0	0	27
Anne Arundel County	8	5	8	5	3	0	3	1	2	0	0	6
Baltimore City	16	12	6	13	2	1	6	0	5	0	1	9
Baltimore County	43	32	18	34	8	3	17	1	9	5	2	29
Calvert County	2	0	2	2	0	0	0	0	0	0	0	2
Caroline County	12	12	8	10	2	0	3	0	3	0	0	9
Carroll County	7	4	3	5	2	0	0	0	0	0	0	7
Cecil County	17	10	9	12	5	0	1	0	1	0	0	16
Charles County	22	16	15	20	2	1	5	0	4	1	0	16
Dorchester County	7	7	6	6	1	0	5	0	5	0	0	2
Frederick County	12	6	9	10	2	0	2	0	1	0	1	10
Garrett County	13	8	7	6	7	1	0	0	0	0	0	13
Harford County	17	10	13	13	4	1	3	0	3	0	0	14
Howard County	24	8	22	18	6	0	8	0	6	2	0	16
Kent County	19	17	14	18	1	0	9	0	9	0	0	10
Montgomery County	23	14	12	19	2	1	14	5	6	1	0	11
Prince Georges County	14	12	3	10	4	0	12	1	10	1	0	2
Queen Anne's County	4	3	2	3	1	0	1	0	1	0	0	3
Somerset County	11	11	6	7	4	0	2	1	1	0	0	10
St Mary's County	6	4	5	4	2	0	3	0	3	0	0	3
Talbot County	24	18	22	16	8	0	5	0	5	0	0	19
Washington County	22	20	9	13	9	0	5	1	3	0	1	18
Wicomico County	8	6	5	5	3	0	1	0	0	1	0	7
Worcester County	2	2	2	2	0	0	0	0	0	0	0	2
Total	361	258	216	275	82	8	106	10	78	11	5	261

Note: Minority = Individuals who indicated that they are race or ethnic minorities and those indicating that they are mixed White with any race or ethnic minority

Table A-2. Organizational Emphasis of Tobacco and Cancer Coalition Survey Respondents' Organizations

Jurisdiction	Tobacco Coalition Respondents (N = 212)						Cancer Coalition Respondents (N = 205)					
	Minorities	Medically Under-served	Low Income	Pregnant Women	Youth	Other	Minorities	Medically Under-served	Low Income	Pregnant Women	Youth	Other
Allegany County	3	3	6	2	10	3	4	4	5	2	3	3
Anne Arundel County	4	2	3	1	4	2	4	2	3	1	4	3
Baltimore City	5	5	5	4	5	3	4	3	3	1	1	1
Baltimore County	17	11	12	5	17	3	11	10	9	0	3	1
Calvert County	0	0	0	0	0	0	1	1	1	0	1	1
Caroline County	3	1	1	0	4	2	3	1	1	0	1	2
Carroll County	1	1	1	0	1	3	1	2	1	1	1	0
Cecil County	4	5	5	4	5	2	2	3	2	1	1	2
Charles County	10	8	10	4	8	3	12	9	12	3	6	2
Dorchester County	5	3	4	1	3	1	4	3	4	1	3	1
Frederick County	2	2	2	1	1	1	4	6	6	2	3	1
Garrett County	3	4	5	4	5	1	1	1	1	1	2	0
Harford County	4	2	3	1	7	2	3	2	3	0	3	4
Howard County	5	4	3	2	3	3	10	10	7	3	5	7
Kent County	9	4	8	5	5	0	7	4	6	5	4	0
Montgomery County	8	4	5	2	6	1	8	6	8	0	0	3
Prince Georges County	8	4	7	4	6	0	3	3	3	2	2	1
Queen Anne's County	0	0	0	0	0	0	1	1	1	0	0	0
Somerset County	6	4	7	3	6	3	3	2	4	2	3	1
St Mary's County	2	1	0	0	2	1	3	1	1	1	2	2
Talbot County	9	6	5	2	6	2	10	9	7	2	4	5
Washington County	7	8	5	3	10	4	4	5	3	0	1	0
Wicomico County	2	1	1	1	2	1	2	2	2	0	0	1
Worcester County	0	1	1	0	0	0	0	1	1	0	0	0
Total	117	84	99	49	116	41	105	91	94	28	53	41

Table A-3. Tobacco and Cancer Coalition Meeting Frequency

Jurisdiction	Tobacco Coalition Member Responses (N = 251)					Cancer Coalition Member Responses (N = 193)				
	One	Two	Three	Four	More than Four	One	Two	Three	Four	More than Four
Allegany County	0	1	3	15	0	0	4	1	5	0
Anne Arundel County	0	3	0	1	1	0	4	0	3	0
Baltimore City	1	3	0	5	1	1	2	0	2	1
Baltimore County	0	0	0	4	28	1	0	0	6	8
Calvert County	0	0	0	0	0	0	0	0	2	0
Caroline County	0	0	1	8	1	0	0	0	5	0
Carroll County	0	0	0	1	3	0	0	0	2	1
Cecil County	0	0	1	7	2	0	0	0	7	1
Charles County	0	0	3	8	5	0	1	4	4	2
Dorchester County	0	0	0	3	4	0	0	0	2	3
Frederick County	0	0	0	0	5	0	0	0	5	3
Garrett County	0	0	0	2	6	1	4	0	1	1
Harford County	0	0	0	2	7	0	0	0	7	5
Howard County	0	0	1	4	2	0	0	2	16	3
Kent County	0	0	1	2	14	0	0	0	0	14
Montgomery County	0	0	0	5	9	0	0	0	1	10
Prince George's County	0	0	0	0	12	0	0	0	0	3
Queen Anne's County	0	0	0	0	3	0	1	0	0	0
Somerset County	0	0	0	9	2	0	0	0	6	0
St Mary's County	0	0	0	4	0	0	0	0	3	1
Talbot County	0	0	0	5	13	0	0	0	7	9
Washington County	1	0	1	7	11	0	0	2	1	4
Wicomico County	0	1	0	3	2	0	1	0	1	2
Worcester County	0	0	0	2	0	0	0	0	1	0
Total	2	8	11	97	131	3	17	9	87	71

Table A-4. Frequency of Meeting Attendance among Tobacco and Cancer Coalition Member Survey Respondents

Jurisdiction	Tobacco Coalition Respondents (N = 252)						Cancer Coalition Respondents (N = 194)					
	Zero	One	Two	Three	Four	More than Four	Zero	One	Two	Three	Four	More than Four
Allegany County	2	2	6	5	3	0	1	3	3	3	0	0
Anne Arundel County	1	0	2	0	0	1	2	2	1	1	1	0
Baltimore City	3	2	2	1	2	1	1	2	1	2	0	0
Baltimore County	3	2	3	4	4	15	2	2	3	3	2	3
Calvert County							0	0	1	1	0	0
Caroline County	0	1	3	3	4	0	0	1	2	1	1	0
Carroll County	2	0	0	0	0	2	0	0	0	2	1	0
Cecil County	0	2	2	1	3	2	0	2	1	0	5	0
Charles County	2	2	4	3	2	3	0	1	4	3	1	3
Dorchester County	0	0	1	2	1	3	0	0	1	1	0	3
Frederick County	0	1	1	0	0	3	0	1	3	0	1	3
Garrett County	1	2	1	1	1	2	2	1	4	0	0	0
Harford County	3	0	1	1	2	2	2	4	2	1	2	1
Howard County	1	1	0	3	1	1	2	1	3	8	6	1
Kent County	2	2	1	0	1	11	1	0	1	0	2	10
Montgomery County	1	0	3	2	4	3	0	0	4	1	2	4
Prince Georges County	1	0	0	0	1	8	0	0	0	0	0	3
Queen Anne's County	0	0	0	2	0	1	0	0	1	0	0	0
Somerset County	0	0	2	7	1	1	0	0	0	6	0	0
St Mary's County	0	0	2	1	1	0	0	1	2	1	0	0
Talbot County	3	3	1	0	0	11	4	2	3	1	1	6
Washington County	0	3	4	3	5	5	0	0	2	3	2	0
Wicomico County	2	0	2	1	0	1	0	0	1	1	0	1
Worcester County	0	0	1	0	1	0	0	0	0	0	1	0
Total	27	23	42	40	37	76	17	23	43	39	28	38

Table A-5. Means of Tobacco and Cancer Coalition Meeting Reminders

Jurisdiction	Tobacco Coalition Member Responses (N = 252)								Cancer Coalition Member Responses (N = 194)							
	Word of mouth	Local Media	Public posting	Mailing	Email/ Web	At Prior Meeting	Phone	Other	Word of mouth	Local Media	Public posting	Mailing	Email/ Web	At Prior Meeting	Phone	Other
Allegany	2	0	0	5	18	10	1	0	2	0	0	4	10	3	2	0
Anne Arundel	1	0	0	5	5	3	1	0	0	0	0	5	7	4	3	0
Baltimore City	1	0	0	7	6	2	1	0	1	0	0	5	2	2	1	0
Baltimore Co	5	1	3	5	31	14	1	0	3	0	0	0	13	6	0	0
Calvert	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0
Caroline	3	0	0	9	6	4	1	0	0	0	0	4	3	1	0	0
Carroll	0	0	0	1	4	2	0	0	0	0	0	2	2	1	0	0
Cecil	6	2	2	8	2	7	3	0	3	2	3	6	3	6	3	0
Charles	6	0	0	15	7	6	3	0	1	0	0	10	5	4	0	0
Dorchester	3	0	0	3	6	4	1	0	2	0	0	3	4	2	0	0
Frederick	0	0	0	0	5	0	0	0	0	0	0	1	8	2	1	0
Garrett	3	0	1	3	7	6	0	1	2	0	0	3	7	4	3	0
Harford	0	0	0	6	5	3	1	0	0	0	0	1	10	3	1	2
Howard	0	0	0	2	6	5	0	0	4	1	1	6	18	12	2	0
Kent	5	0	0	15	1	8	2	0	5	1	0	13	2	7	1	1
Montgomery	0	0	0	0	13	7	1	1	2	0	0	1	10	6	0	0
Prince George's	1	0	0	3	10	6	1	0	0	0	0	0	2	2	0	0
Queen Anne's	0	0	0	2	1	2	1	0	1	0	0	1	0	0	0	0
Somerset	2	1	0	11	4	7	5	0	2	1	0	6	1	4	4	0
St Mary's	1	0	0	0	4	3	0	0	0	0	0	0	4	1	0	0
Talbot	3	0	0	7	14	7	3	0	3	0	0	6	12	4	3	0
Washington	2	0	0	1	18	9	0	1	0	0	0	1	7	4	0	0
Wicomico	0	1	1	2	5	2	0	0	1	0	0	0	2	2	0	0
Worcester	1	1	1	2	1	1	1	0	1	1	1	1	1	1	1	0
Total	45	6	8	112	178	116	27	3	33	6	5	81	133	82	25	3

Table A-6. Organizational Representation of Tobacco Coalition Member Survey Respondents

Jurisdiction	Health Care Provider	Local Health Dept	FBO	Local Svc Org	Grassroots	K-12	College	Subs Abuse Ag	Natl Svc Org	Local Bus	Youth Org	Law Enf	Elected Off	Media	Individual	Other
Allegany	5	6	3	0	1	3	3	0	1	0	0	1	0	0	1	2
Anne Arundel	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
Baltimore City	5	0	0	0	1	1	2	1	1	0	0	0	0	0	1	0
Baltimore Co	8	3	4	2	4	2	3	0	1	0	0	2	1	0	1	2
Calvert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caroline	0	1	3	1	0	1	0	1	1	0	1	1	0	0	0	2
Carroll	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1
Cecil	0	6	1	0	0	1	0	0	0	0	1	0	1	0	0	0
Charles	4	6	1	0	1	0	1	0	0	0	0	2	0	0	0	0
Dorchester	0	1	1	1	0	0	2	0	1	0	0	0	0	0	1	1
Frederick	3	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0
Garrett	3	2	0	0	0	2	2	2	0	0	0	1	1	0	0	0
Harford	0	0	3	0	1	1	1	1	1	0	2	0	1	0	0	2
Howard	2	1	0	3	2	0	0	0	2	0	1	0	0	0	0	2
Kent	2	6	4	1	1	3	1	1	3	1	0	1	1	0	4	2
Montgomery	5	5	1	1	1	2	0	1	0	0	0	0	0	0	1	0
Prince George's	1	2	0	1	2	0	1	0	1	0	2	0	0	0	1	2
Queen Anne's	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Somerset	1	3	1	0	1	1	1	1	2	0	0	0	2	0	0	1
St Mary's	1	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1
Talbot	3	3	4	0	3	1	1	1	7	0	0	1	0	0	2	0
Washington	4	2	1	2	2	1	2	0	0	1	1	2	0	0	1	2
Wicomico	0	1	1	0	0	1	1	0	1	0	0	0	0	0	0	1
Worcester	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	49	49	31	12	24	20	21	9	23	2	8	13	9	0	15	24

Table A-7. Organizational Representation of Cancer Coalition Member Survey Respondents

Jurisdiction	Health Care Provider	Local Health Dept	FBO	Local Svc Org	Grassroots	K-12	College	Subs Abuse Ag	Natl Svc Org	Local Bus	Youth Org	Law Enf	Elected Off	Media	Individual	Other
Allegany	2	4	0	0	1	0	0	0	1	0	0	0	0	0	1	1
Anne Arundel	2	0	2	0	2	1	1	0	0	0	0	1	0	0	0	0
Baltimore City	2	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0
Baltimore Co	6	3	3	0	1	0	1	0	2	0	0	0	1	0	0	2
Calvert	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caroline	0	0	3	0	0	0	0	1	1	0	0	1	0	0	0	2
Carroll	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cecil	1	6	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Charles	5	5	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Dorchester	0	1	0	0	0	0	2	0	1	0	0	0	0	0	1	2
Frederick	3	4	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Garrett	2	2	1	0	0	1	1	0	1	0	0	0	0	0	0	1
Harford	2	3	2	0	0	0	1	0	1	0	1	0	2	0	0	3
Howard	6	4	1	6	1	0	0	0	3	0	1	1	2	0	1	3
Kent	3	6	4	0	1	1	1	1	3	1	0	0	1	0	3	3
Montgomery	5	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Prince George's	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Queen Anne's	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Somerset	1	3	1	0	0	0	0	1	1	0	0	0	2	0	0	0
St Mary's	1	0	1	0	1	0	0	0	2	0	0	1	0	0	0	0
Talbot	6	5	3	0	4	0	1	1	7	0	0	1	0	0	2	0
Washington	6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Wicomico	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Worcester	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	55	60	24	6	15	3	11	5	23	1	2	5	9	0	10	27

Table A-8. How Tobacco and Cancer Coalition Member Survey Respondents were Recruited onto Coalitions

Jurisdiction	Tobacco Coalition Member Responses (N = 252)								Cancer Coalition Member Responses (N = 194)							
	MOTA	Own Org.	LHD	Another Local Coalition	Relative or Friend	Another member	Was not Recruited	Other	MOTA	Own Org.	LHD	Another Local Coalition	Relative or Friend	Another member	Was not Recruited	Other
Allegany	0	2	10	0	0	2	3	2	1	1	4	0	0	2	2	0
Anne Arundel	0	2	2	0	1	0	0	0	0	4	3	0	1	0	0	0
Baltimore City	1	4	2	1	0	0	2	2	1	1	1	0	0	1	0	2
Baltimore Co	3	11	5	2	0	4	6	1	3	8	4	1	0	1	0	0
Calvert	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Caroline	3	2	5	1	0	0	1	0	3	1	4	0	0	0	0	0
Carroll	0	3	1	0	0	0	0	0	0	1	2	0	0	0	0	0
Cecil	0	5	4	0	0	0	0	1	0	2	5	0	0	0	1	0
Charles	2	8	5	1	0	0	0	0	2	3	9	0	0	0	1	0
Dorchester	1	2	3	0	0	0	1	0	1	1	3	0	0	0	1	0
Frederick	1	3	0	1	0	0	1	0	0	2	3	1	0	1	2	0
Garrett	0	4	4	0	0	0	0	0	0	1	3	0	0	2	1	0
Harford	2	5	1	0	0	0	1	1	2	3	3	1	0	1	2	1
Howard	1	3	1	1	0	1	1	0	1	6	10	0	0	2	1	2
Kent	0	5	9	1	1	0	1	0	1	3	8	1	0	0	1	0
Montgomery	0	4	4	3	0	0	1	2	0	9	0	1	0	1	0	1
Prince George's	2	2	5	0	1	0	1	0	2	1	0	0	0	0	0	0
Queen Anne's	0	0	1	0	0	0	2	0	0	1	1	0	0	0	0	0
Somerset	0	4	4	0	0	1	1	1	0	3	2	0	0	1	0	0
St Mary's	0	2	0	0	1	0	1	0	0	2	0	0	1	0	1	1
Talbot	0	5	6	1	0	3	3	0	0	4	5	3	0	4	6	0
Washington	4	6	6	0	0	1	3	0	1	3	3	0	0	0	2	0
Wicomico	1	0	4	1	0	0	0	0	0	1	2	0	0	1	1	0
Worcester	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0
Total	19	81	81	13	4	12	29	10	17	63	77	8	2	17	23	7

Table A-9. Cancer Coalition Member Satisfaction with Meeting Elements

Satisfaction with Coalition Meeting Elements	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The meeting agendas and minutes of coalition meetings.	185	4.36	0.73	48.1%	42.2%	8.1%	1.1%	0.5%
The format of the coalition meetings.	184	4.22	0.80	40.8%	45.1%	10.3%	3.3%	0.5%
The frequency of coalition meetings.	182	4.23	0.79	40.1%	46.7%	9.3%	3.3%	0.5%
The time of day that coalition meetings take place.	184	4.11	0.90	37.0%	45.7%	10.3%	6.0%	1.1%
The capacity of the meeting rooms in which coalition meetings are held.	183	4.31	0.80	45.4%	44.8%	6.6%	1.6%	1.6%
The way in which you are informed or notified that coalition meetings are upcoming.	185	4.44	0.71	53.5%	38.9%	5.9%	1.1%	0.5%
The geographic location where coalition meetings take place.	185	4.39	0.72	49.7%	42.2%	5.9%	1.6%	0.5%
The efforts of the local programs to provide outreach to minority communities.	185	4.25	0.84	43.8%	43.2%	9.2%	2.2%	1.6%

Table A-10. Cancer Coalition Member Agreement with General Contribution Elements

Coalition Contribution Elements	Valid N	Mean	SD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Coalition members contribute items to the coalition meeting agendas.	181	4.06	0.87	33.1%	46.4%	13.8%	6.1%	0.6%
The coalition chairperson encourages discussion of agenda items by coalition members and guests.	181	4.35	0.73	47.0%	43.6%	7.2%	1.7%	0.6%
Coalition members provide input into developing annual plans for the local CRF program each fiscal year.	181	3.92	0.92	28.7%	43.6%	19.9%	6.6%	1.1%
Coalition members provide input for designing local CRF programs.	180	3.92	0.89	26.1%	48.3%	18.3%	6.1%	1.1%
Coalition members provide input during the implementation of local CRF programs.	178	4.00	0.90	31.5%	44.9%	16.9%	5.6%	1.1%
Input provided by coalition members is incorporated into the local CRF program plans.	181	4.02	0.85	30.9%	44.8%	19.9%	3.9%	0.6%
Input provided by coalition members is incorporated into the design of the local CRF program.	180	3.98	0.83	28.3%	46.1%	21.7%	3.3%	0.6%
Input provided by coalition members is incorporated into the implementation of the local CRF program.	179	3.97	0.84	27.9%	46.4%	21.2%	3.9%	0.6%
The mission, vision, and value of the program are clearly communicated to the coalition members.	178	4.22	0.78	39.9%	45.5%	11.8%	2.2%	0.6%

Table A-11. Cancer Coalition Member Agreement with Personal Contribution Elements

Personal Contribution Elements	Valid N	Mean	SD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I have contributed items to the coalition meeting agendas.	179	3.82	1.01	26.8%	43.0%	16.2%	12.8%	1.1%
I actively participate in meetings by speaking on the agenda items.	178	4.03	0.92	33.7%	44.9%	13.5%	6.7%	1.1%
My contributions are taken into account for local CRF program planning.	175	3.93	0.90	28.6%	42.3%	24.0%	3.4%	1.7%
My contributions have been incorporated into the design of the local CRF program.	175	3.76	0.94	25.1%	33.1%	36.6%	2.9%	2.3%
My contributions have been incorporated into the implementation of the local CRF program.	176	3.76	0.93	25.0%	33.0%	37.5%	2.3%	2.3%

Table A-12. Tobacco Coordinator Agreement with Tobacco Program Staffing Issues

Staffing Issues	Valid N	Mean	SD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We have difficulty offering competitive salaries	22	3.50	1.06	9.1%	59.1%	9.1%	18.2%	4.5%
We have difficulty offering competitive fringe benefits	22	3.00	1.27	9.1%	36.4%	13.6%	27.3%	13.6%
There is a limited pool of qualified candidates to choose from	22	3.73	1.24	31.8%	36.4%	9.1%	18.2%	4.5%
We have difficulty hiring qualified staff	22	3.14	1.13	13.6%	22.7%	31.8%	27.3%	4.5%
There has been staff turnover during the past 12 months	20	3.05	1.28	5.0%	50.0%	5.0%	25.0%	15.0%

Table A-13. Tobacco Coordinator Satisfaction with Minority Outreach and Local Programs to Reach Minority Populations

Minority Outreach Issues	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Assistance from the MOTA program in providing outreach to minority populations within jurisdiction.	15	3.33	1.30	20.0%	33.3%	13.3%	26.7%	6.7%
Assistance from the MOTA program to maintain an ethnically and racially diverse coalition.	15	2.93	1.34	13.3%	26.7%	13.3%	33.3%	13.3%
Minority participation on local Tobacco coalition.	23	3.83	.78	13.0%	65.2%	13.0%	8.7%	0.0%
The CRF funded minority initiatives within jurisdiction.	23	3.65	1.03	8.7%	69.6%	8.7%	4.3%	8.7%
The CRF funded minority programs within jurisdiction.	23	3.70	.88	8.7%	65.2%	17.4%	4.3%	4.3%

Table A-14. Tobacco Coordinator Familiarity with Guidelines and Local and State Data for Program Planning

Guidelines and Data Sources	Valid N	Mean	SD	Very Familiar	Familiar	Neutral	Unfamiliar	Very Unfamiliar
The CDC Best Practices Guidelines for tobacco programs.	23	4.52	.73	60.9%	34.8%	0.0%	4.3%	0.0%
Local level data on tobacco use prevalence.	22	4.82	.40	81.8%	18.2%	0.0%	0.0%	0.0%
State level data on tobacco use prevalence.	23	4.57	.51	56.5%	43.5%	0.0%	0.0%	0.0%
Local level data on tobacco enforcement.	23	4.57	.59	60.9%	34.8%	4.3%	0.0%	0.0%
State level data on tobacco enforcement.	23	3.78	.85	17.4%	52.2%	21.7%	8.7%	0.0%
Other existing local tobacco programs.	23	4.22	.67	34.8%	52.2%	13.0%	0.0%	0.0%

Table A-15. Importance of Guidelines, Local and State Data, and Coalition Input for Tobacco Program Planning

Guidelines and Data Sources	Valid N	Mean	SD	Very Important	Important	Neutral	Unimportant	Very Unimportant
The CDC Best Practices Guidelines for tobacco programs.	23	4.52	.51	52.2%	47.8%	0.0%	0.0%	0.0%
Local level data on tobacco use prevalence.	22	4.82	.40	81.8%	18.2%	0.0%	0.0%	0.0%
State level data on tobacco use prevalence.	23	4.35	.57	39.1%	56.5%	4.3%	0.0%	0.0%
Local level data on tobacco enforcement.	23	4.61	.58	65.2%	30.4%	4.3%	0.0%	0.0%
State level data on tobacco enforcement.	23	4.17	.58	26.1%	65.2%	8.7%	0.0%	0.0%
Other existing local tobacco programs.	23	4.30	.47	30.4%	69.6%	0.0%	0.0%	0.0%
Input from coalition members.	23	4.78	.42	78.3%	21.7%	0.0%	0.0%	0.0%

Table A-16. Tobacco Coordinator Satisfaction with Available Data

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The availability of local level data.	23	2.96	1.26	8.7%	34.8%	13.0%	30.4%	13.0%
The availability of State level data.	23	3.17	1.15	8.7%	39.1%	21.7%	21.7%	8.7%
The usefulness of data from 2000 and 2002 tobacco surveys.	23	3.87	.92	21.7%	56.5%	8.7%	13.0%	0.0%

Table A-17. Tobacco Coordinator Satisfaction with Funding Levels

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Level of program funding for FY2006.	23	3.70	.97	17.4%	52.2%	13.0%	17.4%	0.0%
Level of program funding for FY2007.	23	4.43	.79	56.5%	34.8%	4.3%	4.3%	0.0%

Table A-18. Tobacco Coordinator Perceived Levels of Tobacco Program Support from Community Sectors

Community Sector	Valid N	Mean	SD	Very Strong	Strong	Moderate	Weak	Very Weak	% Indicating that Lack of Support Affects Program Implementation*
School officials	23	3.48	1.31	26.1%	30.4%	17.4%	17.4%	8.7%	100.0%
Colleges/universities	22	3.55	1.10	27.3%	18.2%	36.4%	18.2%	0.0%	25.0%
Health care providers	23	4.09	.73	30.4%	47.8%	21.7%	0.0%	0.0%	--
Elected officials	22	3.27	1.16	18.2%	18.2%	45.4%	9.1%	9.1%	100.0%
Local health department	23	4.65	.57	69.6%	26.1%	4.3%	0.0%	0.0%	--
Substance abuse agencies	22	3.77	1.11	31.8%	27.3%	31.8%	4.5%	4.5%	50.0%
Community leaders	22	3.91	1.02	36.4%	27.3%	27.3%	9.1%	0.0%	50.0%
Faith-based organizations	23	3.87	10.6	30.4%	39.1%	21.7%	4.3%	4.3%	50.0%
Community-based organizations	23	4.26	.81	43.5%	43.5%	8.7%	4.3%	0.0%	100.0%
Grassroots organizations	23	3.87	1.10	34.8%	34.8%	13.0%	17.4%	0.0%	25.0%
Non-profit organizations	23	4.22	.67	34.8%	52.2%	13.0%	0.0%	0.0%	--
Adults	23	3.83	.78	21.7%	39.1%	39.1%	0.0%	0.0%	--
Youth	23	3.48	.85	8.7%	39.1%	47.8%	0.0%	4.3%	100.0%
Local media	23	3.30	.93	8.7%	34.8%	34.8%	21.7%	0.0%	60.0%
Local businesses	22	3.09	.81	91.1%	9.1%	63.6%	18.2%	0.0%	50.0%

*Denominator = the number of respondents indicating weak/very weak support.

Table A-19. Tobacco Program Satisfaction with Available Resources

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Technical assistance provided by DHMH.	23	3.43	1.38	26.1%	30.4%	17.4%	13.0%	13.0%
Training provided by DHMH.	23	3.09	1.24	17.4%	17.4%	30.4%	26.1%	8.7%
The availability of DHMH staff when needed.	23	3.52	1.34	30.4%	26.1%	17.4%	17.4%	8.7%
The ability of DHMH staff to answer questions.	23	3.39	1.27	21.7%	30.4%	21.7%	17.4%	8.7%
The support provided by DHMH staff in program planning.	23	3.26	1.25	21.7%	21.7%	21.7%	30.4%	4.3%

Table A-20. Tobacco Program Satisfaction with Instructions and Reporting Requirements

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The clarity of instructions for writing annual proposals.	23	3.22	1.13	4.3%	52.2%	13.1%	21.7%	8.7%
The clarity of instructions for documenting program activities.	23	2.96	1.19	4.3%	39.1%	17.4%	26.1%	13.0%
The ability to consistently report program activities using the instructions.	23	3.04	1.02	4.3%	34.8%	26.1%	30.4%	4.3%
The format for reporting program activities (narrative and key indicator reports).	23	2.87	1.14	4.3%	34.8%	13.0%	39.1%	8.7%
The amount of required paperwork.	23	2.91	1.20	0.0%	47.8%	13.0%	21.7%	17.4%

Table A-21. Cancer Coordinator Agreement with Cancer Program Staffing Issues

Staffing Issues	Valid N	Mean	SD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We have difficulty offering competitive salaries	22	3.36	1.22	18.2%	36.4%	13.6%	27.3%	4.5%
We have difficulty offering competitive fringe benefits	22	3.00	1.20	13.6%	22.7%	18.2%	40.9%	4.5%
There is a limited pool of qualified candidates to choose from	23	3.13	1.29	13.0%	39.1%	4.3%	34.8%	8.7%
We have difficulty hiring qualified staff	23	3.30	1.26	17.4%	39.1%	4.3%	34.8%	4.3%
There has been staff turnover during the past 12 months	21	3.33	1.39	19.0%	42.9%	4.8%	19.0%	14.3%

Table A-22. Cancer Coordinator Satisfaction with Minority Outreach and Local Programs to Reach Minority Populations

Minority Outreach Issues	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Assistance from the MOTA program in providing outreach to minority populations within jurisdiction.	17	2.76	1.44	17.6%	5.9%	41.2%	5.9%	29.4%
Assistance from the MOTA program to maintain an ethnically and racially diverse coalition.	16	2.75	1.39	12.5%	18.8%	25.0%	18.8%	25.0%

Table A-23. Cancer Coordinator Familiarity with Local and State Data and Screening Recommendations for Program Planning

Guidelines and Data Sources	Valid N	Mean	SD	Very Familiar	Familiar	Neutral	Unfamiliar	Very Unfamiliar
Local data on cancer incidence.	24	4.38	.71	45.8%	50.0%	0.0%	4.2%	0.0%
State data on cancer incidence.	24	4.38	.71	45.8%	50.0%	0.0%	4.2%	0.0%
Local data on cancer mortality.	24	4.25	.85	41.7%	50.0%	0.0%	8.3%	0.0%
State data on cancer mortality.	24	4.38	.71	45.8%	50.0%	0.0%	4.2%	0.0%
Evidence-based screening recommendations.	24	4.58	.58	62.5%	33.3%	4.2%	0.0%	0.0%
Other existing local cancer prevention, education, screening and/or treatment programs.	24	4.33	.76	45.8%	45.8%	4.2%	4.2%	0.0%

Table A-24. Importance of Guidelines, Local and State Data, and Coalition Input for Cancer Program Planning

Guidelines and Data Sources	Valid N	Mean	SD	Very Important	Important	Neutral	Unimportant	Very Unimportant
Local data on cancer incidence.	24	4.54	.66	62.5%	29.2%	8.3%	0.0%	0.0%
State data on cancer incidence.	24	4.46	.72	58.3%	29.2%	12.5%	0.0%	0.0%
Local data on cancer mortality.	24	4.54	.66	62.5%	29.2%	8.3%	0.0%	0.0%
State data on cancer mortality.	24	4.42	.72	54.2%	33.3%	12.5%	0.0%	0.0%
Evidence-based screening recommendations.	24	4.71	.46	70.8%	29.2%	0.0%	0.0%	0.0%
Activities of other existing local cancer prevention, education, screening and/or treatment programs.	24	4.42	.65	50.0%	41.7%	8.3%	0.0%	0.0%
Input from local coalition members.	24	4.55	.67	63.6%	27.3%	9.1%	0.0%	0.0%

Table A-25. Cancer Coordinator Satisfaction with Available Data

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The availability of local level data.	24	3.83	1.01	25.0%	50.0%	8.3%	16.7%	0.0%
The availability of State level data.	24	4.13	.95	41.7%	37.5%	12.5%	8.3%	0.0%
The usefulness of data provided by DHMH.	23	4.09	.79	30.4%	52.2%	13.0%	4.3%	0.0%

Table A-26. Cancer Coordinator Perceived Levels of Cancer Program Support from Community Sectors

Community Sector	Valid N	Mean	SD	Very Strong	Strong	Moderate	Weak	Very Weak	Lack of Support Affects Program Implementation*
School officials	24	2.63	1.41	12.5%	16.7%	20.8%	20.8%	29.2%	8.3%
Elected officials	24	3.04	1.33	16.7%	20.8%	29.2%	16.7%	16.7%	50.0%
Community leaders	24	3.64	1.09	27.3%	22.7%	40.9%	4.5%	4.5%	50.0%
Adults	24	3.83	1.01	29.2%	37.5%	20.8%	12.5%	0.0%	66.7%
Youth	24	2.29	1.27	4.2%	20.8%	8.3%	33.3%	33.3%	0.0%
Local media	23	3.22	1.17	8.7%	39.1%	30.4%	8.7%	13.0%	60.0%
Local businesses	24	2.96	1.08	4.2%	33.3%	25.0%	29.2%	8.3%	55.6%

*Denominator = the number of respondents indicating weak/very weak support.

Table A-27. Cancer Coordinator Satisfaction with Available Resources

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Level of program funding for FY2006.	24	2.92	1.25	8.3%	33.3%	12.5%	33.3%	12.5%
Technical assistance provided by DHMH.	24	4.33	.76	45.8%	45.8%	4.2%	4.2%	0.0%
Training provided by DHMH.	24	4.29	.62	37.5%	54.2%	8.3%	0.0%	0.0%
The availability of DHMH staff when needed.	24	4.42	.78	54.2%	37.5%	4.2%	4.2%	0.0%
The ability of DHMH staff to answer questions.	24	4.38	.77	50.0%	41.7%	4.2%	4.2%	0.0%
The support provided by DHMH staff in program planning.	24	4.17	.87	41.7%	37.5%	16.7%	4.2%	0.0%

Table A-28. Cancer Coordinator Satisfaction with Instructions and Reporting Requirements

Program Resources	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The clarity of instructions that for writing annual proposals.	23	3.96	.71	17.4%	65.2%	13.0%	4.3%	0.0%
The clarity of instructions for documenting program activities.	23	4.00	.52	13.0%	73.9%	13.0%	0.0%	0.0%
The ability to consistently report program activities using the instructions.	23	3.96	.56	13.0%	69.6%	17.4%	0.0%	0.0%
The electronic reporting format for education activities.	23	3.78	.90	17.4%	56.5%	13.0%	13.0%	0.0%
The electronic reporting format for screening and treatment activities.	23	3.91	1.04	26.1%	56.5%	4.3%	8.7%	4.3%
The reporting format for quarterly and annual reports.	23	4.04	.64	17.4%	73.9%	4.3%	4.3%	0.0%
The amount of paperwork required.	23	3.04	1.07	4.3%	34.8%	30.4%	21.7%	8.7%

Table A-29. MOTA Grantee Agreement with Program Staffing Issues

Staffing Issues	Valid N	Mean	SD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We have difficulty offering competitive salaries	11	3.36	1.21	18.2%	36.4%	9.1%	36.4%	0.0%
We have difficulty offering competitive fringe benefits	10	3.50	1.35	30.0%	30.0%	0.0%	40.0%	0.0%
There is a limited pool of qualified candidates to choose from	12	3.00	1.21	0.0%	50.0%	16.7%	16.7%	16.7%
We have difficulty hiring qualified staff	12	2.67	1.07	33.3%	0.0%	8.3%	50.0%	8.3%
There has been staff turnover during the past 12 months	10	3.30	1.42	20.0%	40.0%	0.0%	30.0%	10.0%

Table A-30. MOTA Grantee Satisfaction with Coalition Meeting Characteristics

Meeting Characteristics	Coalition Type	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Meeting frequency	Tobacco	6	4.83	.41	83.3%	16.7%	0.0%	0.0%	0.0%
	Cancer	6	4.33	.52	33.3%	66.7%	0.0%	0.0%	0.0%
	Combined	7	4.43	.54	42.9%	57.1%	0.0%	0.0%	0.0%
Time of day for meetings	Tobacco	6	3.67	1.37	33.3%	33.3%	0.0%	33.3%	0.0%
	Cancer	6	3.00	1.27	16.7%	16.7%	16.7%	50.0%	0.0%
	Combined	7	3.43	1.13	0.0%	71.4%	14.3%	0.0%	14.3%
Room capacity for meetings	Tobacco	6	3.67	1.03	16.7%	50.0%	16.7%	16.7%	0.0%
	Cancer	6	3.83	.98	16.7%	66.7%	0.0%	16.7%	0.0%
	Combined	7	4.29	.49	28.6%	71.4%	0.0%	0.0%	0.0%
Meeting publicity	Tobacco	6	4.00	.63	16.7%	66.7%	16.7%	0.0%	0.0%
	Cancer	6	3.83	.75	16.7%	50.0%	33.3%	0.0%	0.0%
	Combined	7	3.86	.90	14.3%	71.4%	0.0%	14.3%	0.0%
Meeting reminders	Tobacco	6	4.33	.52	33.3%	66.7%	0.0%	0.0%	0.0%
	Cancer	6	4.17	.41	16.7%	83.3%	0.0%	0.0%	0.0%
	Combined	7	4.00	1.00	28.6%	57.1%	0.0%	14.3%	0.0%
Geographic location of meetings	Tobacco	6	3.83	.98	16.7%	66.7%	0.0%	16.7%	0.0%
	Cancer	6	3.83	.98	16.7%	66.7%	0.0%	16.7%	0.0%
	Combined	7	3.86	.90	14.3%	42.6%	14.3%	28.6%	0.0%
Program efforts to conduct minority outreach	Tobacco	5	4.20	1.30	60.0%	20.0%	0.0%	20.0%	0.0%
	Cancer	6	4.33	1.21	66.7%	16.7%	0.0%	16.7%	0.0%
	Combined	7	3.43	1.13	14.3%	42.9%	14.3%	28.6%	0.0%
Agenda contains minority health issues	Tobacco	6	3.83	1.17	33.3%	33.3%	16.7%	16.7%	0.0%
	Cancer	6	4.33	.52	33.3%	66.7%	0.0%	0.0%	0.0%
	Combined	7	3.57	1.40	42.9%	0.0%	28.6%	28.6%	0.0%
Coalition chair encourages participation	Tobacco	6	4.50	.55	50.0%	50.0%	0.0%	0.0%	0.0%
	Cancer	6	4.33	.52	33.3%	66.7%	0.0%	0.0%	0.0%
	Combined	7	3.86	1.07	28.6%	28.6%	14.3%	14.3%	0.0%

Table A-31. MOTA Grantee Agreement with Coalition Input and Minority Focus of MOTA Program Planning

Program Planning	Valid N	Mean	SD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Minority coalition members provide input for Tobacco plans	13	3.69	1.18	23.1%	46.2%	15.4%	7.7%	7.7%
Minority coalition members provide input for Cancer plans	13	3.54	1.20	15.4%	53.8%	7.7%	15.4%	7.7%
Tobacco plans accurately describe minority health needs	13	3.69	1.18	23.1%	46.2%	15.4%	7.7%	7.7%
Cancer plans accurately describe minority health needs	13	3.77	1.01	23.1%	46.2%	15.4%	15.4%	0.0%
Tobacco plans contain goals to address minority health needs	13	3.77	.83	15.4%	53.8%	23.1%	7.7%	0.0%
Cancer plans contain goals to address minority health needs	13	3.77	1.09	23.1%	53.8%	0.0%	23.1%	0.0%

Table A-32. MOTA Grantee Satisfaction with MOTA Program Elements

Program Elements	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Level of program funding	13	3.62	1.33	38.5%	15.4%	15.4%	30.8%	0.0%
Technical Assistance from DHMH	13	4.62	.65	69.2%	23.1%	7.7%	0.0%	0.0%
Training from DHMH	13	4.54	.52	53.8%	46.2%	0.0%	0.0%	0.0%
Availability of DHMH staff	13	4.69	.48	69.2%	30.8%	0.0%	0.0%	0.0%
Ability of DHMH to answer questions	13	4.77	.44	76.9%	23.1%	0.0%	0.0%	0.0%
DHMH support in planning	13	4.38	.77	53.8%	30.8%	15.4%	0.0%	0.0%
Dissemination of grant opportunities	13	4.23	1.01	53.8%	23.1%	15.4%	7.7%	0.0%

Table A-33. MOTA Grantee Satisfaction with Resources and Information for MOTA Program Implementation

Resources and Information	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Availability of culturally appropriate tobacco materials	13	4.00	.82	23.1%	61.5%	7.7%	7.7%	0.0%
Availability of culturally appropriate cancer materials	13	3.92	.95	23.1%	61.5%	0.0%	15.4%	0.0%
Availability of local tobacco data	13	3.85	1.14	30.8%	46.2%	0.0%	23.1%	0.0%
Availability of local cancer data	13	4.00	1.00	30.8%	53.8%	0.0%	15.4%	0.0%
Availability of State tobacco data	13	4.23	.83	38.5%	53.8%	0.0%	7.7%	0.0%
Availability of State cancer data	13	4.23	.83	38.5%	53.8%	0.0%	7.7%	0.0%
Utility of tobacco data provided by DHMH	13	4.46	.88	61.5%	30.8%	0.0%	7.7%	0.0%
Utility of cancer data provided by DHMH	13	4.46	.88	61.5%	30.8%	0.0%	7.7%	0.0%

Table A-34. MOTA Grantee Satisfaction with Instructions and Reporting Requirements for MOTA Programs

Instructions and Reporting Requirements	Valid N	Mean	SD	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Clarity of instructions for writing proposals	13	4.46	.66	53.8%	38.5%	7.7%	0.0%	0.0%
Clarity of instructions for documenting program activities	13	4.54	.52	53.8%	46.2%	0.0%	0.0%	0.0%
Ability to consistently report program activities	13	4.54	.66	61.5%	30.8%	7.7%	0.0%	0.0%
Format for reporting program activities	13	4.38	.87	53.8%	38.5%	0.0%	7.7%	0.0%
Fiscal reporting	13	4.23	.93	46.8%	38.5%	7.7%	7.7%	0.0%
Amount of paperwork required	13	3.69	1.18	23.1%	46.2%	15.4%	7.7%	7.7%

Appendix B: Jurisdiction-Level Tobacco Program Tables

Table B-1. Tobacco User Callers to the Quitline by Jurisdiction and Month

Jurisdiction	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Total
Allegany County	0	4	2	1	0	3	5	5	20
Anne Arundel County	1	10	7	11	11	17	25	45	127
Baltimore City	11	34	26	22	32	58	178	207	568
Baltimore County	3	24	29	15	21	37	79	132	340
Calvert County	0	2	1	0	4	3	4	4	18
Caroline County	0	1	0	0	2	2	3	4	12
Carroll County	0	6	0	5	8	6	6	13	44
Cecil County	0	2	3	3	1	3	7	8	27
Charles County	0	0	0	2	3	7	4	19	35
Dorchester County	0	1	2	0	0	2	3	7	15
Frederick County	1	4	1	3	3	3	5	7	27
Garrett County	0	2	1	0	1	0	0	0	4
Harford County	0	2	6	2	1	3	20	15	49
Howard County	0	13	5	2	6	2	10	17	55
Kent County	0	0	0	0	0	2	3	3	8
Montgomery County	4	8	6	17	19	20	7	59	140
Prince George's County	4	21	9	23	26	51	22	162	318
Queen Anne's County	0	0	1	0	0	2	2	2	7
St. Mary's County	0	3	0	0	2	4	2	10	21
Somerset County	0	0	0	0	1	1	4	3	9
Talbot County	0	0	1	0	3	11	10	11	36
Washington County	0	9	4	3	1	5	1	13	36
Wicomico County	0	6	1	1	0	1	4	5	18
Worcester County	0	1	1	2	1	1	5	3	14
Other	1	0	0	0	0	0	0	0	1
Not Collected	1	4	2	0	0	1	2	5	15
Total	26	157	108	112	146	245	411	759	1,964

Source: Data collected by Maryland DHMH

Table B-2. Attendees at Community Outreach Activities by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	—	—	—	1,394	2,204	5,838	9,436
Anne Arundel County	—	—	—	1,301	2,887	7,270	11,458
Baltimore City	—	—	—	25,206	38,034	25,611	88,851
Baltimore County	—	—	—	117,579	974	6,873	125,426
Calvert County	—	—	—	11,425	11,509	22,743	45,677
Caroline County	—	—	—	0	0	0	0
Carroll County	—	—	—	4,925	23,410	10,537	38,872
Cecil County	—	—	—	31	601	850	1,482
Charles County	—	—	—	180,345	1,051	3,972	185,368
Dorchester County	—	—	—	633	48	367	1,048
Frederick County	—	—	—	0	19,341	10,232	29,573
Garrett County	—	—	—	68	326	1,729	2,123
Harford County	—	—	—	2,890	1,195	3,950	8,035
Howard County	—	—	—	253	17,031	4,643	21,927
Kent County	—	—	—	433	50	283	766
Montgomery County	—	—	—	410,412	194,233	7,379	612,024
Prince George's County	—	—	—	3,867	6,442	14,962	25,271
Queen Anne's County	—	—	—	1,810	1,361	172	3,343
Somerset County	—	—	—	750	2,586	1,962	5,298
St. Mary's County	—	—	—	7,798	15,968	8,048	31,814
Talbot County	—	—	—	200	0	0	200
Washington County	—	—	—	66,401	6,982	4,997	78,380
Wicomico County	—	—	—	443	1,514	9,605	11,562
Worcester County	—	—	—	2,383	4,526	832	7,741
Maryland	—	—	—	840,547	352,273	152,855	1,345,675

— = Data was not reported in FY2001-FY2003

Source: DHMH Tobacco Program Activities Database

Table B-3. Community Leaders Trained During Community Outreach Activities by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	0	46	0	0	11	0	57
Anne Arundel County	0	0	160	0	0	150	310
Baltimore City	0	178	305	267	251	141	1,142
Baltimore County	15	0	0	20	104	46	185
Calvert County	34	41	0	0	0	44	119
Caroline County	12	4	100	95	7	26	244
Carroll County	0	14	22	33	17	2	88
Cecil County	0	46	78	34	65	35	258
Charles County	0	6	26	0	12	0	44
Dorchester County	0	0	3	6	0	20	29
Frederick County	0	181	5	37	12	16	251
Garrett County	0	0	0	0	0	0	0
Harford County	32	56	10	160	232	256	746
Howard County	0	90	176	233	110	0	609
Kent County	0	43	16	91	4	49	203
Montgomery County	0	0	151	58	95	128	432
Prince George's County	0	200	438	166	3,299	946	5,049
Queen Anne's County	0	0	0	33	6	10	49
Somerset County	0	0	0	0	25	14	39
St. Mary's County	16	7	0	0	0	0	23
Talbot County	2	38	19	6	7	0	72
Washington County	0	6	1	9	0	0	16
Wicomico County	0	49	889	13	26	40	1,017
Worcester County	0	37		0	0	0	37
Maryland	111	1,042	2,399	1,261	4,283	1,923	11,019

Source: DHMH Tobacco Program Activities Database

Table B-4. Number of Local Tobacco Awareness Campaigns by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	4	—	10	4	10	5	33
Anne Arundel County	1	—	789	10	4	5	809
Baltimore City	72	—	240	463	212	264	1,251
Baltimore County	0	—	73	77	23	17	190
Calvert County	1	—	63	20	19	116	219
Caroline County	1	—	0	25	17	23	66
Carroll County	20	—	0	32	5	19	76
Cecil County	0	—	11	7	11	11	40
Charles County	1	—	151	49	7	15	223
Dorchester County	2	—	17	31	2	0	52
Frederick County	0	—	15	111	92	56	274
Garrett County	0	—	2	2	2	4	10
Harford County	0	—	15	34	15	45	109
Howard County	0	—	76	2	13	5	96
Kent County	0	—	5	2	3	6	16
Montgomery County	1	—	105	60	107	44	317
Prince George's County	1	—	21	43	122	109	296
Queen Anne's County	0	—	4	8	24	4	40
Somerset County	5	—	2	2	6	6	21
St. Mary's County	52	—	86	36	38	10	222
Talbot County	1	—	20	12	28	29	90
Washington County	2	—	139	73	91	170	475
Wicomico County	3	—	1	4	6	7	21
Worcester County	34	—	2	4	9	3	52
Maryland	201	—	1,847	1,111	866	973	4,998

— = Data was not reported in FY2002

Source: DHMH Tobacco Program Activities Database

Table B-5. Number of Local Community Tobacco Programs Implemented by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	0	0	11	6	9	5	31
Anne Arundel County	0	0	57	0	0	0	57
Baltimore City	1	1	230	877	903	368	2,380
Baltimore County	0	1	23	27	15	12	78
Calvert County	0	0	8	29	10	60	107
Caroline County	0	1	53	59	15	13	141
Carroll County	0	0	0	102	6	11	119
Cecil County	9	5	85	26	27	19	171
Charles County	1	6	128	169	10	6	320
Dorchester County	0	0	24	45	3	0	72
Frederick County	1	2	20	15	14	9	61
Garrett County	0	0	4	1	1	6	12
Harford County	1	0	14	69	51	45	180
Howard County	0	0	23	3	10	12	48
Kent County	0	0	16	30	8	20	74
Montgomery County	0	0	40	38	38	46	162
Prince George's County	0	0	13	58	148	112	331
Queen Anne's County	0	2	1	25	20	5	53
Somerset County	0	0	0	5	2	18	25
St. Mary's County	0	4	9	47	86	45	191
Talbot County	3	2	21	20	30	25	101
Washington County	1	4	80	31	24	167	307
Wicomico County	4	3	3	2	5	23	40
Worcester County	0	0	0	8	8	19	35
Maryland	21	31	863	1,692	1,443	1,046	5,096

Source: DHMH Tobacco Program Activities Database

Note: Community Programs include Community Coalition Programs, Faith-Based Programs, and Secondhand Smoke Programs

Table B-6. Number of Local Tobacco Policy Promotion Activities by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	—	—	2	4	5	5	16
Anne Arundel County	—	—	0	0	0	0	0
Baltimore City	—	—	0	470	180	80	730
Baltimore County	—	—	0	0	0	0	0
Calvert County	—	—	6	0	1	7	14
Caroline County	—	—	3	4	0	1	8
Carroll County	—	—	0	0	1	0	1
Cecil County	—	—	2	0	2	2	6
Charles County	—	—	4	0	2	6	12
Dorchester County	—	—	0	0	0	0	0
Frederick County	—	—	4	3	3	9	19
Garrett County	—	—	4	4	2	7	17
Harford County	—	—	5	12	7	11	35
Howard County	—	—	2	2	2	1	7
Kent County	—	—	4	1	20	4	29
Montgomery County	—	—	13	5	6	0	24
Prince George's County	—	—	1	4	38	0	43
Queen Anne's County	—	—	0	4	2	0	6
Somerset County	—	—	1	0	0	3	4
St. Mary's County	—	—	0	0	0	3	3
Talbot County	—	—	5	5	5	5	20
Washington County	—	—	2	0	0	1	3
Wicomico County	—	—	0	1	0	0	1
Worcester County	—	—	1	2	0	0	3
Maryland	—	—	59	521	276	145	1,001

— = Data was not reported in FY2001 and FY2002
Source: DHMH Tobacco Program Activities Database

Table B-7. Number of Pre-Kindergarten Students and Parents Educated by Jurisdiction and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006	
	Students	Parents	Students	Parents	Students	Parents	Students	Parents	Students	Parents	Students	Parents
Allegany County	0	0	—	—	1,715	2,652	0	282	491	185	401	0
Anne Arundel County	0	0	—	—	0	0	0	0	1,961	8	0	0
Baltimore City	0	0	—	—	780	1,402	2,251	435	1,700	746	1,905	589
Baltimore County	0	0	—	—	641	712	82	1,465	831	982	330	364
Calvert County	0	144	—	—	0	70	145	0	669	517	1256	1,203
Caroline County	0	0	—	—	300	300	400	365	845	845	100	134
Carroll County	0	0	—	—	2,975	0	5,039	38	0	46	0	60
Cecil County	0	0	—	—	1,253	1,253	1,510	1,510	1,344	1,344	1,119	1,119
Charles County	0	0	—	—	300	150	465	495	754	300	792	7
Dorchester County	0	300	—	—	587	406	588	506	109	118	75	43
Frederick County	0	0	—	—	262	262	132	0	284	0	112	4,280
Garrett County	0	26	—	—	43	55	159	57	96	249	52	41
Harford County	0	0	—	—	627	70	75	0	1,146	2,292	1,079	1,079
Howard County	0	0	—	—	622	63	290	195	184	184	311	275
Kent County	38	0	—	—	38	36	143	84	48	36	242	207
Montgomery County	0	0	—	—	643	841	0	0	0	0	0	0
Prince George's County	0	0	—	—	373	0	242	19	308	0	0	0
Queen Anne's County	0	0	—	—	0	0	50	0	21	45	0	0
Somerset County	0	0	—	—	0	0	178	95	885	108	829	56
St. Mary's County	137	25	—	—	0	30	314	309	486	729	423	295
Talbot County	0	365	—	—	322	551	1,200	1,200	445	785	500	800
Washington County	0	0	—	—	0	0	0	0	0	0	0	0
Wicomico County	677	70	—	—	1,021	1,071	945	945	710	710	829	1,027
Worcester County	0	0	—	—	191	40	0	12	191	229	191	266
Maryland	852	930	—	—	12,693	9,964	14,208	8,012	13,508	10,458	10,546	11,845

— = Data was not reported in FY2002
Source: DHMH Tobacco Program Activities Database

Table B-8. Number of K-12 Student Attendees to School-Based Tobacco Education by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	0	822	2,796	10,827	2,334	16,825	33,604
Anne Arundel County	0	100	580	15,001	23,494	13,840	53,015
Baltimore City	46	19,330	0	22,227	22,262	24,511	88,376
Baltimore County	0	20,303	1,523	48	13	32,869	54,756
Calvert County	0	428	2,084	1,544	1,544	4,732	10,332
Caroline County	1,000	4,615	4,230	2,429	2,429	1,587	16,290
Carroll County	0	60	2,936	10,887	10,887	10,313	35,083
Cecil County	0	0	13,785	36,369	36,369	14,606	101,129
Charles County	0	16,080	52,527	23,269	23,269	13,839	128,984
Dorchester County	0	172	95	9,354	9,354	1,032	20,007
Frederick County	0	5,725	3,235	12,836	12,836	3,520	38,152
Garrett County	0	813	222	2,500	2,500	1,960	7,995
Harford County	646	4,355	4,499	8,984	8,984	4,837	32,305
Howard County	0	419	22,527	23,670	23,670	3,167	73,453
Kent County	0	0	327	611	611	2,474	4,023
Montgomery County	0	4,750	25,000	64,594	64,594	42,895	201,833
Prince George's County	0	18,973	6,040	22,280	22,280	13,087	82,660
Queen Anne's County	0	0	101	4,739	4,739	1,136	10,715
Somerset County	30	560	318	2,606	2,606	4,970	11,090
St. Mary's County	0	975	0	7,581	7,581	7,166	23,303
Talbot County	0	480	6,915	5,182	5,182	3,033	20,792
Washington County	10,000	3,014	1,867	9,980	9,980	2,038	36,879
Wicomico County	0	2,615	1,203	6,986	6,986	1,445	19,235
Worcester County	0	17	2,288	5,001	5,001	2,258	14,565
Maryland	11,722	104,606	155,098	309,505	309,505	228,140	1,118,576

Source: DHMH Tobacco Program Activities Database

Note: Students include public, private, and alternative school students

Table B-9. Number of College Student Attendees to School-Based Education by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	10	23	381	1,117	184	1,995	3,710
Anne Arundel County	0	0	0	137	0	0	137
Baltimore City	0	17	0	5,042	1,206	1,986	8,251
Baltimore County	0	142	500	30	300	200	1,172
Calvert County	0	120	1,700	1,250	750	732	4,552
Caroline County	0	0	0	0	0	0	0
Carroll County	0	0	36	6,950	3,017	1,202	11,205
Cecil County	0	30	2,657	807	1,675	3,396	8,565
Charles County	0	2,055	2,093	9,291	1,205	840	15,484
Dorchester County	0	0	276	417	270	48	1,011
Frederick County	0	0	0	1,199	25	99	1,323
Garrett County	0	22	0	155	250	130	557
Harford County	0	300	0	100	118	280	798
Howard County	0	0	510	732	1,090	492	2,824
Kent County	0	0	3	239	86	1,391	1,719
Montgomery County	0	0	11,250	2,275	2,203	1,533	17,261
Prince George's County	0	35,238	5,771	5,452	587	418	47,466
Queen Anne's County	0	0	0	68	75	0	143
Somerset County	0	250	209	458	735	1,522	3,174
St. Mary's County	0	500	540	2,300	570	848	4,758
Talbot County	0	0	0	5	0	0	5
Washington County	0	148	128	116	422	627	1,441
Wicomico County	0	970	11,236	6,000	3,500	1,335	23,041
Worcester County	0	5	513	599	740	158	2,015
Maryland	10	39,820	37,803	44,739	19,008	19,232	160,612

Source: DHMH Tobacco Program Activities Database

Table B-10. Peer Programs: Number Organized and Number of Students Reached by Jurisdiction and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006	
	Number Organized	Students Reached	Number Organized	Students Reached	Number Organized	Students Reached	Number Organized	Students Reached	Number Organized	Students Reached	Number Organized	Students Reached
Allegany County	0	0	—	—	3	830	3	815	2	825	1	0
Anne Arundel County	0	0	—	—	0	0	0	0	0	0	0	0
Baltimore City	0	0	—	—	8	350	33	440	18	852	0	0
Baltimore County	0	0	—	—	55	536	6	1,845	39	510	0	237
Calvert County	0	0	—	—	23	3,155	14	780	0	1	3	248
Caroline County	0	0	—	—	3	2,900	4	500	3	2,600	6	4,500
Carroll County	0	0	—	—	0	0	0	0	0	0	0	0
Cecil County	0	0	—	—	95	17,659	5	38,669	3	100	0	0
Charles County	0	0	—	—	7	2,900	10	1,800	2	360	5	213
Dorchester County	0	0	—	—	2	29	4	138	1	6	1	4
Frederick County	0	0	—	—	1	328	30	808	18	9,275	16	50
Garrett County	0	0	—	—	2	27	0	0	2	20	2	24
Harford County	0	0	—	—	0	0	72	118,601	17	0	5	209
Howard County	0	0	—	—	13	120	0	0	3	335	0	0
Kent County	0	0	—	—	0	0	0	0	0	0	1	800
Montgomery County	8	100	—	—	8	1,002	113	17,030	54	13,136	10	3,260
Prince George's County	0	0	—	—	8	5,328	19	10,102	25	764	64	2,007
Queen Anne's County	0	0	—	—	0	0	9	4,340	1	50	1	15
Somerset County	0	0	—	—	0	0	2	250	1	300	4	16
St. Mary's County	0	0	—	—	0	125	6	2,357	8	6,240	21	5,761
Talbot County	0	0	—	—	11	5,172	8	5,100	9	3,950	15	2,700
Washington County	0	0	—	—	32	0	0	350	0	0	0	0
Wicomico County	10	0	—	—	1	36	2	52	4	1,631	1	3,527
Worcester County	0	0	—	—	1	31	2	110	3	86	3	108
Maryland	18	100	—	—	273	40,528	342	204,087	213	41,041	159	23,679

— = Data was not reported in FY2002

Source: DHMH Tobacco Program Activities Database

Table B-11. Number of Kindergarten-12 and College Students Provided with Cessation Programs

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006	
	K-12 Students	College Students	K-12 Students	College Students	K-12 Students	College Students	K-12 Students	College Students	K-12 Students	College Students	K-12 Students	College Students
Allegany County	—	10	17	—	90	91	8	77	35	119	7	77
Anne Arundel County	—	0	64	—	52	0	8	127	0	0	5	0
Baltimore City	—	0	125	—	0	0	0	157	0	722	28	37
Baltimore County	—	0	20	—	1,117	583	92	910	0	145	58	127
Calvert County	—	0	0	—	0	0	0	63	0	1	547	52
Caroline County	—	0	4	—	4	0	6	0	28	0	5	0
Carroll County	—	0	0	—	4	0	0	0	0	35	0	99
Cecil County	—	0	0	—	0	0	0	0	0	0	1	0
Charles County	—	0	0	—	2	2	26	33	0	8	0	70
Dorchester County	—	0	59	—	22	20	505	260	51	0	18	4
Frederick County	—	0	45	—	0	0	131	25	0	0	4	98
Garrett County	—	0	1	—	180	2	46	0	11	0	26	0
Harford County	—	0	243	—	8	7	16	0	12	0	5	0
Howard County	—	0	0	—	69	0	60	0	34	2	9	0
Kent County	—	0	17	—	0	17	0	11	43	2	96	20
Montgomery County	—	0	25	—	65	5	2,949	33	787	11	202	5
Prince George's County	—	0	123	—	264	185	0	158	308	0	120	36
Queen Anne's County	—	0	0	—	0	0	28	12	28	0	0	0
Somerset County	—	0	0	—	10	10	0	0	0	3	44	0
St. Mary's County	—	0	159	—	0	0	380	0	0	45	0	44
Talbot County	—	0	32	—	16	0	0	0	4	0	0	0
Washington County	—	0	4	—	36	44	2	0	0	0	12	0
Wicomico County	—	0	140	—	27	70	16	17	1	25	10	0
Worcester County	—	0	0	—	20	15	6	19	14	26	11	31
Maryland	—	10	1,078	—	1,986	1,051	4,279	1,902	1,356	1,144	1,208	700

— = Data was not reported for K-12 students in FY2001 and for college students in FY2002

Source: DHMH Tobacco Program Activities Database

Table B-12. Number of Daycare and School Staff Trained on Tobacco Curricula

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	0	13	2	26	3	0	44
Anne Arundel County	0	2	154	0	2,230	308	2,694
Baltimore City	80	343	269	282	234	314	1,522
Baltimore County	0	89	410	25	307	328	1,159
Calvert County	0	15	117	36	150	245	563
Caroline County	29	13	224	76	70	32	444
Carroll County	77	15	0	80	57	41	270
Cecil County	0	20	93	42	69	64	288
Charles County	100	12	224	115	20	36	507
Dorchester County	5	15	44	18	52	4	138
Frederick County	0	299	70	2,962	50	576	3,957
Garrett County	0	4	436	0	87	0	527
Harford County	27	153	112	153	54	171	670
Howard County	0	13	99	151	81	48	392
Kent County	8	0	28	0	3	96	135
Montgomery County	0	0	934	474	673	205	2,286
Prince George's County	0	15	144	729	446	127	1,461
Queen Anne's County	0	0	0	21	17	0	38
Somerset County	4	7	0	0	38	37	86
St. Mary's County	0	0	27	24	323	23	397
Talbot County	5	7	59	6	9	12	98
Washington County	0	25	79	181	500	240	1,025
Wicomico County	5	13	169	92	61	23	363
Worcester County	12	14	7	5	32	51	121
Maryland	352	1,087	3,701	5,498	5,566	2,981	19,185

Source: DHMH Tobacco Program Activities Database
Note: Curricula include CDC and TUPP

Table B-13. Number of “No Smoking” Signs Installed in Schools by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	0	—	0	0	0	0	0
Anne Arundel County	0	—	0	0	0	0	0
Baltimore City	0	—	0	100	40	0	140
Baltimore County	0	—	10	0	214	0	224
Calvert County	0	—	0	0	0	0	0
Caroline County	0	—	100	20	15	0	135
Carroll County	0	—	0	7	4	4	15
Cecil County	0	—	10	10	0	0	20
Charles County	0	—	0	0	1	0	1
Dorchester County	0	—	1	0	0	0	1
Frederick County	0	—	8	12	57	6	83
Garrett County	14	—	0	0	43	0	57
Harford County	0	—	0	0	20	0	20
Howard County	0	—	0	0	0	25	25
Kent County	0	—	16	0	0	0	16
Montgomery County	0	—	267	699	62	16	1,044
Prince George's County	0	—	0	0	1	3	4
Queen Anne's County	0	—	0	123	75	0	198
Somerset County	0	—	0	0	0	16	16
St. Mary's County	200	—	0	0	0	0	200
Talbot County	0	—	3	0	1	11	15
Washington County	0	—	0	0	0	0	0
Wicomico County	0	—	0	0	0	0	0
Worcester County	0	—	0	0	0	0	0
Maryland	214	—	415	971	533	81	2,214

— = Data was not reported in FY2002

Source: DHMH Tobacco Program Activities Database

Table B-14. Number of Merchants Educated by Topic, Jurisdiction, and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006	
	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement
Allegany County	96	0	—	—	459	0	460	460	188	188	225	225
Anne Arundel County	0	0	—	—	40	313	0	0	0	0	0	0
Baltimore City	0	0	—	—	0	1,374	7,000	7,000	11,646	11,646	7,000	7,000
Baltimore County	0	0	—	—	30	15	1,560	1,560	100	0	0	0
Calvert County	0	0	—	—	11	2	172	0	0	0	0	0
Caroline County	0	0	—	—	115	115	60	60	52	52	36	36
Carroll County	0	0	—	—	8	0	0	1	212	0	300	104
Cecil County	0	0	—	—	71	0	194	0	157	65	125	41
Charles County	0	0	—	—	58	0	146	0	65	157	80	0
Dorchester County	0	0	—	—	101	101	60	60	70	0	40	0
Frederick County	0	0	—	—	29	0	27	0	13	0	14	0
Garrett County	0	0	—	—	72	63	0	0	0	0	51	51
Harford County	0	0	—	—	250	0	260	26	102	0	251	251
Howard County	0	0	—	—	607	483	236	236	201	201	3	4
Kent County	0	0	—	—	196	196	268	268	90	90	219	219
Montgomery County	0	0	—	—	2,298	2,298	253	402	444	1,173	920	772
Prince George's County	0	0	—	—	1,462	1,462	1,216	1,216	1,454	1,454	1,702	1,702
Queen Anne's County	0	0	—	—	0	0	329	46	23	23	28	18
Somerset County	9	0	—	—	0	0	72	0	36	18	27	27
St. Mary's County	0	0	—	—	12	12	134	0	98	0	125	0
Talbot County	0	0	—	—	93	93	106	106	85	85	64	64
Washington County	0	0	—	—	80	80	26	26	0	0	0	0
Wicomico County	0	0	—	—	6	1	66	66	11	5	84	87
Worcester County	53	0	—	—	17	0	0	0	30	30	13	0
Maryland	158	0	—	—	6,015	6,608	12,645	11,533	15,077	15,187	11,307	10,601

— = Data was not reported in FY2002

Source: DHMH Tobacco Program Activities Database

Table B-15. Number of Compliance Checks by Type, Jurisdiction, and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006	
	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement	Youth Access	Product Placement
Allegany County	0	—	183	—	150	140	460	274	152	59	225	143
Anne Arundel County	0	—	230	—	0	444	7	78	0	224	0	48
Baltimore City	0	—	436	—	271	271	3,941	1,659	988	1,272	1,026	1,026
Baltimore County	0	—	0	—	0	0	0	0	0	0	0	0
Calvert County	0	—	37	—	234	0	172	0	41	41	109	0
Caroline County	0	—	0	—	6	4	5	5	1	12	2	23
Carroll County	0	—	354	—	0	101	136	88	70	0	142	104
Cecil County	48	—	61	—	210	16	111	0	8	45	19	13
Charles County	185	—	534	—	678	0	892	0	180	60	49	80
Dorchester County	71	—	69	—	15	104	144	0	70	0	100	0
Frederick County	0	—	30	—	224	0	57	0	18	0	75	0
Garrett County	0	—	77	—	36	32	61	0	84	0	58	0
Harford County	0	—	350	—	7	0	9	0	95	0	115	87
Howard County	0	—	193	—	42	199	220	235	525	262	208	46
Kent County	0	—	0	—	0	0	0	267	10	233	46	480
Montgomery County	0	—	1,802	—	308	2,298	359	118	1,104	1,614	1,926	772
Prince George's County	0	—	0	—	232	1,362	701	899	956	1,588	960	1,702
Queen Anne's County	0	—	0	—	0	0	4	26	8	23	10	0
Somerset County	0	—	27	—	0	0	210	0	4	0	56	11
St. Mary's County	134	—	25	—	12	0	67	0	223	0	127	0
Talbot County	0	—	68	—	54	97	106	106	85	85	64	64
Washington County	1	—	143	—	55	17	42	0	100	0	37	0
Wicomico County	55	—	187	—	72	124	74	385	127	127	164	162
Worcester County	0	—	47	—	165	0	0	39	88	0	63	0
Maryland	494	—	4,853	—	2,771	5,209	7,778	4,179	4,937	5,645	5,581	4,761

— = Data was for product placement compliance checks was not reported in FY2001 and FY2002

Source: DHMH Tobacco Program Activities Database

Table B-16. Number of Citations Given by Type of Citation, Jurisdiction, and Fiscal Year

Jurisdiction	FY2001			FY2002			FY2003			FY2004			FY2005			FY2006		
	Youth Sales	Prod. Place.	Youth Poss.	Youth Sales	Prod. Place.	Youth Poss.	Youth Sales	Prod. Place.	Youth Poss.	Youth Sales	Prod. Place.	Youth Poss.	Youth Sales	Prod. Place.	Youth Poss.	Youth Sales	Prod. Place.	Youth Poss.
Allegany	0	—	8	46	—	13	0	0	83	0	0	59	0	0	23	0	0	12
Anne Arundel	0	—	0	0	—	89	0	0	0	0	0	0	16	41	0	6	7	0
Baltimore City	0	—	0	0	—	59	112	0	0	72	0	24	75	0	26	184	0	0
Baltimore Co	0	—	0	0	—	0	0	0	0	0	0	7	0	0	0	0	0	0
Calvert	0	—	0	0	—	0	13	0	0	28	0	0	11	0	13	5	0	11
Caroline	0	—	0	0	—	0	7	0	54	8	0	50	0	0	38	4	0	22
Carroll	0	—	0	72	—	0	57	0	0	0	0	43	7	0	13	10	0	30
Cecil	5	—	0	10	—	0	30	0	37	31	0	3	34	0	6	30	0	1
Charles	0	—	0	218	—	0	0	0	183	0	0	133	0	0	65	0	0	48
Dorchester	4	—	0	0	—	0	15	0	12	3	0	0	10	0	0	4	0	13
Frederick	0	—	83	153	—	0	90	0	30	23	0	44	26	0	127	54	0	27
Garrett	0	—	0	0	—	6	3	0	4	3	0	5	3	0	8	6	0	22
Harford	0	—	0	0	—	3	22	9	233	41	0	226	4	0	112	26	22	172
Howard	0	—	0	0	—	89	54	34	139	42	3	0	104	0	28	42	1	0
Kent	0	—	0	0	—	0	0	0	10	0	0	13	0	2	18	3	1	27
Montgomery	0	—	0	90	—	530	39	52	0	41	4	0	111	3	0	325	5	0
Prince George's	0	—	0	0	—	0	37	3	0	73	2	0	109	4	0	86	0	0
Queen Anne's	0	—	0	0	—	0	1	0	6	4	0	0	5	0	4	0	0	0
Somerset	2	—	0	10	—	3	2	0	5	4	0	9	1	0	7	0	1	7
St. Mary's	0	—	0	42	—	5	26	0	8	12	0	36	49	0	47	27	0	35
Talbot	0	—	0	0	—	4	2	0	24	0	0	18	14	0	33	0	0	16
Washington	0	—	0	72	—	48	29	0	33	38	0	13	18	0	28	15	0	53
Wicomico	0	—	15	141	—	10	0	2	112	33	4	48	0	0	146	0	0	84
Worcester	0	—	0	0	—	0	0	0	2	0	0	0	3	0	23	0	0	22
Maryland	11	—	106	854	—	859	539	100	975	456	13	731	600	50	765	827	37	602

— = Data was for product placement citations was not reported in FY2001 and FY2002

Source: DHMH Tobacco Program Activities Database

Table B-17. Total Number of Individuals Enrolled in Cessation Classes by Jurisdiction and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006	
	Individual Counseling	Group Cessation	Individual Counseling	Group Cessation	Individual Counseling	Group Cessation	Individual Counseling	Group Cessation	Individual Counseling	Group Cessation	Individual Counseling	Group Cessation
Allegany County	0	0	—	20	136	136	84	59	70	167	26	26
Anne Arundel County	0	0	—	57	341	78	93	243	82	301	0	76
Baltimore City	0	0	—	651	2,516	1,225	6,769	2,671	6,248	3,751	1,864	3,164
Baltimore County	0	0	—	308	575	1,540	640	600	492	224	998	410
Calvert County	0	0	—	5	156	41	140	50	60	30	30	45
Caroline County	0	0	—	88	115	599	28	286	73	107	39	74
Carroll County	0	0	—	119	133	106	121	88	628	115	492	128
Cecil County	0	0	—	80	1,598	420	153	0	172	0	65	0
Charles County	0	0	—	97	608	135	1,409	60	38	52	37	94
Dorchester County	0	0	—	228	142	62	164	211	217	49	11	29
Frederick County	0	0	—	33	155	126	1,304	306	869	264	0	159
Garrett County	0	0	—	102	36	81	124	72	12	86	20	73
Harford County	0	0	—	104	41	67	10	134	29	49	18	99
Howard County	0	0	—	198	324	95	20	189	209	123	0	125
Kent County	0	0	—	76	40	17	82	17	48	0	29	27
Montgomery County	0	0	—	50	969	240	1,584	1,659	1,863	1,795	832	651
Prince George's County	0	0	—	443	187	215	282	306	854	555	468	259
Queen Anne's County	0	0	—	4	93	43	118	46	203	46	0	7
Somerset County	0	0	—	47	27	6	4	11	23	12	0	0
St. Mary's County	0	26	—	168	0	101	190	231	186	200	0	188
Talbot County	7	0	—	60	136	28	325	113	212	181	287	127
Washington County	0	74	—	119	17	61	5	58	1	28	0	52
Wicomico County	0	32	—	180	66	110	4	19	0	0	0	87
Worcester County	0	0	—	63	49	67	45	73	13	43	38	64
Maryland	7	132	—	3,300	8,460	5,599	13,698	7,502	12,602	8,178	5,254	5,964

— = Individual counseling data was not reported in FY2002
Source: DHMH Tobacco Program Activities Database

Table B-18. Number of Cessation Aids Provided by Type of Aid, Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Patch	Zyban	Gum	Patch	Zyban	Gum	Patch	Zyban	Gum	Patch	Zyban	Gum	Patch	Zyban	Gum
Allegany	0	0	0	188	0	12	75	0	0	161	0	0	25	0	0
Anne Arundel	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baltimore City	0	0	0	561	64	0	844	16	23	1,802	0	82	884	0	18
Baltimore Co	0	0	0	0	0	0	112	0	0	69	20	4	155	32	23
Calvert	0	0	0	30	0	0	0	0	0	14	0	0	36	0	0
Caroline	130	0	0	271	0	0	183	0	3	82	0	17	64	0	7
Carroll	55	0	0	151	0	0	285	0	23	208	0	76	215	0	51
Cecil	0	0	0	527	0	0	150	0	0	402	0	0	272	0	0
Charles	0	0	0	43	0	0	26	0	0	50	0	0	65	0	0
Dorchester	50	0	0	38	0	0	12	0	0	107	0	0	2	0	0
Frederick	0	0	0	0	0	0	91	6	0	58	0	0	52	0	0
Garrett	61	0	0	74	0	0	66	22	0	63	24	4	76	18	0
Harford	18	0	0	144	0	0	84	0	1	40	0	8	55	0	5
Howard	0	0	0	46	44	0	149	41	37	60	51	17	77	86	25
Kent	20	0	0	14	20	0	15	33	1	0	17	5	14	37	5
Montgomery	0	0	0	33	4	0	251	0	15	142	0	39	83	0	53
Prince George's	0	0	0	149	0	0	162	7	19	198	0	14	96	0	0
Queen Anne's	0	0	0	43	0	0	120	0	0	106	0	5	63	0	0
Somerset	34	0	0	10	0	0	11	0	0	20	0	4	0	0	0
St. Mary's	0	0	0	112	38	0	139	24	0	300	0	0	135	0	0
Talbot	53	0	0	80	0	0	184	0	0	209	8	15	94	0	27
Washington	21	0	0	135	0	0	164	0	0	261	0	0	239	0	0
Wicomico	0	0	0	0	0	0	1	2	0	0	0	0	3	3	0
Worcester	17	0	0	249	0	0	65	0	0	52	0	0	57	0	0
Maryland	477	0	0	2,898	170	12	3,189	151	122	4,404	120	290	2,762	176	214

Source: DHMH Tobacco Program Activities Database

Table B-19. Middle School Current Smoking Prevalence by Jurisdiction and Year

MIDDLE SCHOOL													
Jurisdiction	2000				2002				2006				Relative change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany	9.9	7.0	12.8	229	8.3	6.1	10.5	195	6.9	6.2	7.6	140	-30.3%
Anne Arundel	9.4	6.3	12.5	1,556	6.0	4.2	7.9	1,055	3.7	2.1	5.3	602	-60.6%
Baltimore City	9.0	6.0	12.0	1,818	7.7	5.8	9.7	1,524	6.6	3.2	10.0	1,153	-26.7%
Baltimore Co	6.5	3.2	9.8	1,536	4.6	2.7	6.5	1,121	3.0	1.9	4.1	696	-53.8%
Calvert	9.6	6.2	13.0	337	6.1	3.7	8.5	238	3.8	1.9	5.6	152	-60.4%
Caroline	13.5	9.6	17.4	165	10.6	8.1	13.1	141	7.5	5.6	9.4	89	-44.4%
Carroll	4.9	2.1	7.7	302	3.1	1.5	4.7	208	3.5	1.9	5.1	233	-28.6%
Cecil	11.3	8.4	14.2	389	9.8	7.1	12.6	359	6.1	1.6	10.7	235	-46.0%
Charles	9.3	6.5	12.1	478	5.5	3.9	7.2	303	1.6	0.8	2.4	98	-82.8%
Dorchester	11.1	8.2	14.0	122	8.2	5.8	10.6	99	6.3	2.2	10.5	63	-43.2%
Frederick	8.8	6.5	11.1	699	4.2	2.6	5.7	366	2.6	1.4	3.7	232	-70.5%
Garrett	9.5	6.1	12.9	101	10.9	7.1	14.6	119	8.2	1.8	14.6	93	-13.7%
Harford	10.0	7.4	12.6	874	5.5	3.7	7.3	508	2.7	0.5	4.9	241	-73.0%
Howard	4.1	3.0	5.2	407	3.4	2.2	4.7	371	1.7	0.6	2.7	195	-58.5%
Kent	8.0	5.4	10.6	50	12.9	7.8	17.9	83	5.9	2.7	9.2	28	-26.3%
Montgomery	3.7	2.2	5.2	1,065	3.1	2.0	4.3	981	3.0	1.5	4.5	916	-18.9%
Prince George's	5.1	2.1	8.1	1,363	3.8	2.3	5.2	1,098	3.7	2.1	5.3	1,063	-27.5%
Queen Anne's	9.6	6.0	13.2	152	5.3	3.5	7.0	91	4.3	2.8	5.9	74	-55.2%
Somerset	17.5	13.2	21.8	113	14.4	9.5	19.3	88	6.9	3.9	10.0	47	-60.6%
St. Mary's	7.5	5.0	10.0	235	8.5	6.3	10.6	285	3.2	0.8	5.5	114	-57.3%
Talbot	9.3	5.2	13.4	91	7.2	4.6	9.9	72	5.8	5.1	6.6	57	-37.6%
Washington	12.6	8.7	16.5	559	8.9	6.2	11.7	408	5.4	4.1	6.8	253	-57.1%
Wicomico	12.0	8.4	15.7	360	10.4	7.2	13.5	299	6.4	4.6	8.2	184	-46.7%
Worcester	9.0	5.8	12.2	133	6.4	5.1	7.8	100	5.0	2.4	7.6	71	-44.4%
Maryland	7.2	6.3	8.1	13,134	5.2	4.7	5.7	10,110	3.7	3.2	4.3	7,029	-48.6%

Source: 2000, 2002, 2006 Maryland YTS
These data represent underage youth only

Table B-20. High School Current Smoking Prevalence by Jurisdiction and Year

Jurisdiction	HIGH SCHOOL												
	2000				2002				2006				Relative change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany	35.6	31.9	39.3	1,091	31.6	26.7	36.5	937	23.3	17.8	28.9	686	-34.6%
Anne Arundel	28.5	25.3	31.7	5,647	22.2	19.9	24.5	4,533	16.7	13.9	19.5	3,651	-41.4%
Baltimore City	12.5	9.6	15.4	2,605	11.1	9.1	13.0	2,430	8.6	6.7	10.5	1,832	-31.2%
Baltimore Co	23.7	20.7	26.7	6,510	19.7	16.3	23.1	5,694	15.8	12.8	18.7	4,933	-33.3%
Calvert	28.3	24.7	31.9	1,164	28.1	22.3	33.9	1,267	20.3	17.5	23.1	1,119	-28.3%
Caroline	36.0	31.0	41.0	527	28.3	24.7	31.8	413	23.7	22.8	24.6	393	-34.2%
Carroll	25.9	22.2	29.6	1,960	23.1	18.9	27.3	1,816	18.1	16.3	19.9	1,699	-30.1%
Cecil	32.3	28.2	36.4	1,224	24.7	21.0	28.5	988	24.0	21.4	26.5	1,125	-25.7%
Charles	28.0	24.0	32.0	1,797	22.0	18.7	25.3	1,469	16.0	12.2	19.7	1,347	-42.9%
Dorchester	27.2	24.0	30.4	373	22.9	19.3	26.6	306	18.7	11.1	26.4	272	-31.3%
Frederick	28.5	25.1	31.9	2,697	22.4	19.3	25.5	2,283	18.8	15.9	21.6	2,239	-34.0%
Garrett	32.8	29.0	36.6	413	27.7	23.6	31.8	331	24.1	17.6	30.6	336	-26.5%
Harford	31.0	27.9	34.1	3,058	21.8	18.8	24.7	2,294	17.4	15.9	18.9	2,030	-43.9%
Howard	21.5	18.5	24.5	2,506	18.7	16.3	21.1	2,331	13.0	10.4	15.6	1,924	-39.5%
Kent	35.3	29.8	40.8	267	29.5	25.4	33.6	215	27.5	27.5	27.5	203	-22.1%
Montgomery	19.4	16.9	21.9	6,389	14.9	13.0	16.8	5,494	13.4	11.1	15.8	5,498	-30.9%
Prince George's	15.3	12.3	18.3	4,816	12.8	11.2	14.3	4,172	8.3	6.6	9.9	3,191	-45.8%
Queen Anne's	30.1	27.0	33.2	531	28.6	25.5	31.7	531	23.8	18.4	29.2	567	-20.9%
Somerset	38.9	30.9	46.9	302	26.1	20.7	31.5	187	19.5	14.4	24.5	147	-49.9%
St. Mary's	29.0	25.2	32.8	1,129	26.0	21.4	30.5	1,060	15.4	10.8	20.1	756	-46.9%
Talbot	34.5	30.7	38.3	403	27.0	23.6	30.5	327	26.2	22.7	29.6	354	-24.1%
Washington	31.9	28.8	35.0	1,624	24.8	21.5	28.0	1,345	22.1	18.9	25.2	1,356	-30.7%
Wicomico	31.3	27.4	35.2	1,090	25.6	21.2	30.0	914	16.1	13.5	18.8	629	-48.6%
Worcester	28.0	24.1	31.9	550	24.0	19.3	28.7	475	19.2	17.0	21.5	433	-31.4%
Maryland	23.0	22.1	23.9	48,674	18.7	17.9	19.5	41,814	14.7	13.9	15.4	36,720	-36.1%

Source: 2000, 2002, 2006 Maryland YTS
These data represent underage youth only

Table B-21. Middle School Current Smokeless Tobacco Use Prevalence by Jurisdiction and Year

MIDDLE SCHOOL													
Jurisdiction	2000				2002				2006				Relative change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany	3.3	1.8	4.8	79	3.4	2.2	4.7	80	1.7	0.8	2.5	35	-48.5%
Anne Arundel	1.9	0.6	3.2	314	2.1	1.2	3.1	373	2.0	1.3	2.7	324	5.3%
Baltimore City	3.7	2.0	5.4	767	4.3	2.6	6.0	837	2.7	1.3	4.1	466	-27.0%
Baltimore Co	1.4	0.5	2.3	342	1.5	1.0	1.9	354	2.0	1.1	2.9	462	42.9%
Calvert	1.8	1.0	2.6	67	2.0	1.0	3.0	78	1.2	0.4	2.1	50	-33.3%
Caroline	2.6	1.2	4.0	32	2.8	1.6	3.9	37	3.1	1.0	5.2	37	19.2%
Carroll	1.0	0.4	1.6	63	1.3	0.4	2.2	88	1.7	0.7	2.8	116	70.0%
Cecil	2.2	1.1	3.3	79	2.3	1.4	3.3	86	2.4	1.6	3.3	94	9.1%
Charles	3.1	1.8	4.4	161	1.3	0.6	2.0	67	0.9	0.3	1.6	57	-71.0%
Dorchester	2.3	0.9	3.7	28	2.2	1.2	3.1	26	1.5	0.2	2.8	15	-34.8%
Frederick	2.3	1.2	3.4	189	2.5	1.2	3.8	218	2.0	1.1	2.8	178	-13.0%
Garrett	5.4	2.5	8.3	58	6.9	4.6	9.1	75	5.0	2.8	7.3	58	-7.4%
Harford	1.7	1.0	2.4	152	2.4	1.4	3.3	219	1.0	0.7	1.4	90	-41.2%
Howard	1.8	0.9	2.7	179	1.4	0.9	1.9	152	0.7	0.0	1.3	80	-61.1%
Kent	4.4	2.2	6.6	28	4.9	2.3	7.5	32	3.8	0.0	7.7	18	-13.6%
Montgomery	1.1	0.5	1.7	325	1.3	0.6	1.9	384	1.9	1.0	2.8	572	72.7%
Prince George's	2.4	0.7	4.1	659	1.4	0.8	1.9	408	1.9	0.9	2.8	548	-20.8%
Queen Anne's	2.7	1.6	3.8	44	2.5	1.5	3.4	42	2.4	1.1	3.7	41	-11.1%
Somerset	4.2	2.2	6.2	28	3.1	1.0	5.3	19	2.2	1.6	2.8	15	-47.6%
St. Mary's	1.9	0.8	3.0	61	3.3	2.0	4.5	110	1.5	0.8	2.3	55	-21.1%
Talbot	2.7	1.2	4.2	27	4.1	2.5	5.7	40	2.4	2.1	2.8	24	-11.1%
Washington	4.3	2.4	6.2	197	3.0	1.7	4.4	139	2.7	1.1	4.3	128	-37.2%
Wicomico	0.8	0.1	1.5	25	2.8	1.6	4.0	80	2.6	0.8	4.5	75	225.0%
Worcester	2.3	0.9	3.7	35	2.7	1.7	3.6	42	1.9	0.3	3.5	27	-17.4%
Maryland	2.1	1.7	2.5	3,913	2.1	1.8	2.3	3,987	1.9	1.6	2.2	3,564	-9.5%

Source: 2000, 2002, 2006 Maryland YTS
These data represent underage youth only

Table B-22. High School Current Smokeless Tobacco Use Prevalence by Jurisdiction and Year

HIGH SCHOOL													
Jurisdiction	2000				2002				2006				Relative change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany	13.4	11.3	15.5	424	12.6	9.5	15.7	380	9.1	6.6	11.6	271	-32.1%
Anne Arundel	4.9	3.6	6.2	992	5.5	4.3	6.7	1,126	5.4	3.9	7.0	1,177	10.2%
Baltimore City	3.4	2.1	4.7	723	4.4	3.1	5.6	931	3.4	2.2	4.7	721	0.0%
Baltimore Co	3.6	2.7	4.5	1,015	4.2	3.1	5.3	1,210	4.5	3.2	5.7	1,398	25.0%
Calvert	3.6	2.5	4.7	153	5.8	3.4	8.2	262	4.9	3.8	6.1	270	36.1%
Caroline	9.4	6.5	12.3	140	7.0	4.9	9.0	103	7.4	7.3	7.5	124	-21.3%
Carroll	5.1	3.7	6.5	385	6.3	4.7	7.9	499	5.3	4.3	6.2	499	3.9%
Cecil	4.2	2.8	5.6	164	5.1	3.5	6.7	206	8.2	7.7	8.8	389	95.2%
Charles	4.5	3.2	5.8	295	6.4	3.5	9.4	416	4.8	4.2	5.4	407	6.7%
Dorchester	6.1	3.9	8.3	85	5.8	3.8	7.7	78	6.4	4.7	8.1	92	4.9%
Frederick	6.7	5.1	8.3	647	7.4	5.9	8.9	761	7.1	5.2	9.1	852	6.0%
Garrett	10.6	8.0	13.2	136	12.9	10.0	15.8	156	13.2	12.6	13.8	184	24.5%
Harford	7.6	6.1	9.1	775	4.8	3.7	6.0	512	5.1	3.7	6.4	591	-32.9%
Howard	7.1	5.2	9.0	843	6.5	5.1	7.9	820	5.4	4.1	6.7	797	-23.9%
Kent	13.3	10.1	16.5	103	11.9	9.2	14.7	89	7.0	7.0	7.0	50	-47.4%
Montgomery	4.6	3.2	6.0	1,535	4.0	3.0	4.9	1,485	4.4	2.9	5.8	1,793	-4.3%
Prince George's	2.4	1.2	3.6	764	4.3	2.9	5.7	1,401	3.2	2.4	3.9	1,211	33.3%
Queen Anne's	5.8	4.2	7.4	104	7.9	5.9	10.0	149	6.9	4.8	9.0	163	19.0%
Somerset	6.4	3.2	9.6	50	9.3	5.1	13.4	67	6.7	5.4	8.1	50	4.7%
St. Mary's	4.8	3.3	6.3	194	4.9	2.6	7.2	199	3.7	2.8	4.5	179	-22.9%
Talbot	5.2	3.6	6.8	63	7.0	5.1	8.9	85	8.6	7.2	10.0	116	65.4%
Washington	7.0	5.4	8.6	366	5.9	4.5	7.3	322	6.9	4.2	9.6	425	-1.4%
Wicomico	4.0	2.6	5.4	144	3.7	2.1	5.3	132	3.8	2.3	5.3	150	-5.0%
Worcester	4.8	3.0	6.6	96	6.8	4.3	9.2	134	5.9	3.8	8.0	134	22.9%
Maryland	4.7	4.3	5.1	10,196	5.2	4.8	5.6	11,523	4.8	4.4	5.2	12,041	2.1%

Source: 2000, 2002, 2006 Maryland YTS
These data represent underage youth only

Table B-23. Middle School Current Any Tobacco Use Prevalence by Jurisdiction and Year

MIDDLE SCHOOL													
Jurisdiction	2000				2002				2006				Relative change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany	13.0	9.6	16.4	313	14.5	11.4	17.6	335	9.4	8.3	10.5	194	-27.7%
Anne Arundel	12.8	9.3	16.3	2,216	11.7	9.2	14.2	1,966	6.4	3.7	9.0	1,061	-50.0%
Baltimore City	18.2	13.5	22.9	4,089	18.2	14.3	22.2	3,406	14.5	9.1	19.9	2,684	-20.3%
Baltimore Co	11.8	7.9	15.7	2,918	9.4	5.1	13.8	2,176	6.4	4.9	7.9	1,507	-45.8%
Calvert	13.5	10.2	16.8	496	9.4	6.2	12.5	351	5.1	2.1	8.0	208	-62.2%
Caroline	16.8	12.7	20.9	212	15.7	12.4	19.0	203	11.4	10.3	12.4	138	-32.1%
Carroll	8.3	5.0	11.6	530	5.4	3.3	7.6	357	5.9	3.4	8.4	394	-28.9%
Cecil	15.0	11.7	18.3	539	15.3	12.0	18.7	549	9.9	5.0	14.9	388	-34.0%
Charles	13.3	10.0	16.6	711	10.8	8.3	13.3	552	4.5	2.7	6.2	279	-66.2%
Dorchester	15.8	12.0	19.6	185	13.9	10.5	17.3	159	10.8	7.0	14.5	110	-31.6%
Frederick	12.8	9.9	15.7	1,054	8.5	5.8	11.3	736	5.3	3.7	7.0	490	-58.6%
Garrett	15.2	9.8	20.6	166	16.9	12.1	21.6	179	12.0	5.6	18.5	140	-21.1%
Harford	13.0	10.2	15.8	1,184	10.8	8.3	13.2	965	5.2	2.7	7.6	468	-60.0%
Howard	7.4	5.4	9.4	754	7.1	6.1	8.0	753	3.9	2.0	5.9	467	-47.3%
Kent	15.2	12.0	18.4	99	19.5	13.1	25.9	123	10.8	7.6	14.1	53	-28.9%
Montgomery	6.4	4.0	8.8	1,897	7.4	5.4	9.4	2,189	6.1	4.1	8.1	1,898	-4.7%
Prince George's	11.3	5.7	16.9	3,167	10.1	6.6	13.5	2,797	8.3	6.0	10.5	2,479	-26.5%
Queen Anne's	14.1	9.6	18.6	234	9.8	7.5	12.2	166	7.6	5.2	9.9	132	-46.1%
Somerset	21.7	17.9	25.5	147	22.3	16.4	28.3	130	13.3	8.9	17.8	95	-38.7%
St. Mary's	12.3	9.0	15.6	402	13.8	11.1	16.5	451	6.2	3.1	9.3	230	-49.6%
Talbot	13.7	9.3	18.1	138	15.1	11.1	19.0	144	9.9	8.8	11.1	100	-27.7%
Washington	17.5	12.9	22.1	812	14.2	10.8	17.6	640	9.8	6.9	12.8	469	-44.0%
Wicomico	15.2	11.2	19.2	476	16.7	12.4	21.0	462	10.6	8.0	13.2	319	-30.3%
Worcester	14.1	10.1	18.1	217	12.4	10.5	14.3	186	8.0	4.5	11.5	117	-43.3%
Maryland	12.0	10.5	13.5	22,956	10.8	9.9	11.7	19,976	7.5	6.6	8.3	14,419	-37.5%

Source: 2000, 2002, 2006 Maryland YTS
These data represent underage youth only

Table B-24. High School Current Any Tobacco Use Prevalence by Jurisdiction and Year

HIGH SCHOOL													
Jurisdiction	2000				2002				2006				Relative change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany	42.7	39.1	46.3	1,375	38.0	33.0	43.0	1,133	31.4	27.1	35.8	951	-26.5%
Anne Arundel	34.6	31.2	38.0	7,133	29.8	27.1	32.6	6,064	23.9	20.6	27.3	5,404	-30.9%
Baltimore City	22.1	18.5	25.7	4,872	24.0	20.8	27.3	4,915	16.4	12.9	19.8	3,666	-25.8%
Baltimore Co	29.9	26.9	32.9	8,527	28.6	24.6	32.6	8,091	23.2	20.3	26.1	7,553	-22.4%
Calvert	33.4	29.4	37.4	1,436	36.3	29.6	43.0	1,628	25.9	22.4	29.4	1,468	-22.5%
Caroline	43.2	38.1	48.3	658	36.9	33.0	40.9	544	30.6	30.5	30.8	525	-29.2%
Carroll	31.5	27.3	35.7	2,484	31.5	26.7	36.2	2,486	24.6	22.7	26.6	2,370	-21.9%
Cecil	37.7	33.3	42.1	1,477	32.5	28.7	36.3	1,290	31.3	29.3	33.3	1,526	-17.0%
Charles	33.5	29.4	37.6	2,246	30.9	26.9	35.0	2,020	21.5	18.2	24.8	1,878	-35.8%
Dorchester	33.0	29.5	36.5	479	32.5	28.3	36.7	429	25.7	22.0	29.4	389	-22.1%
Frederick	35.4	31.8	39.0	3,481	30.6	27.0	34.2	3,130	26.5	23.2	29.9	3,305	-25.1%
Garrett	39.0	34.9	43.1	503	38.4	33.5	43.3	460	33.6	27.9	39.3	478	-13.8%
Harford	37.3	33.9	40.7	3,888	29.5	26.0	33.1	3,084	24.5	22.4	26.6	2,965	-34.3%
Howard	26.6	23.4	29.8	3,216	27.3	24.3	30.2	3,387	20.5	17.7	23.3	3,135	-22.9%
Kent	45.6	40.5	50.7	364	40.7	36.0	45.4	302	33.5	33.5	33.5	257	-26.5%
Montgomery	25.3	22.6	28.0	8,707	22.9	20.4	25.4	8,371	20.2	17.3	23.2	8,622	-20.2%
Prince George's	21.9	18.4	25.4	7,292	23.2	20.7	25.7	7,300	14.6	12.4	16.9	5,861	-33.3%
Queen Anne's	36.0	32.7	39.3	662	35.8	32.5	39.1	668	31.1	26.5	35.7	767	-13.6%
Somerset	43.9	36.7	51.1	357	36.4	29.4	43.3	259	26.9	24.8	29.0	208	-38.7%
St. Mary's	33.1	29.3	36.9	1,374	34.0	28.3	39.6	1,390	21.0	17.1	24.9	1,052	-36.6%
Talbot	40.0	36.2	43.8	494	37.9	33.7	42.1	462	33.1	28.9	37.3	470	-17.3%
Washington	37.2	33.9	40.5	1,958	31.1	27.8	34.3	1,681	29.2	25.4	33.0	1,850	-21.5%
Wicomico	37.1	33.2	41.0	1,340	31.0	26.0	36.0	1,091	21.9	19.8	24.0	878	-41.0%
Worcester	33.6	29.3	37.9	684	33.4	28.4	38.5	663	26.4	23.6	29.3	612	-21.4%
Maryland	29.4	28.4	30.4	65,007	27.7	26.7	28.7	60,847	21.6	20.7	22.5	56,192	-26.5%

Source: 2000, 2002, 2006 Maryland YTS
These data represent underage youth only

Table B-25. Middle School Smoking Uptake by Category and Jurisdiction, 2000 and 2006

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
ALLEGANY	Not Open to Smoking	54.4	54.4	49.6	1,171	68.9	68.9	66.0	1,322
	Open to Smoking	16.5	16.5	13.5	354	11.5	11.5	9.1	221
	Prior Experimenters	18.5	18.5	14.7	398	12.2	12.2	11.4	235
	Early Stage Smokers	8.6	8.6	6.2	186	6.4	6.4	5.5	123
	Established Smokers	2.0	2.0	0.7	43	0.9	0.9	0.6	17
	Total	100.0	100.0		2,152	100.0	100.0		1,918
ANNE ARUNDEL	Not Open to Smoking	58.6	58.6	52.9	8,853	71.8	71.8	66.7	11,069
	Open to Smoking	14.9	14.9	13.4	2,257	14.8	14.8	12.4	2,280
	Prior Experimenters	16.1	16.1	11.2	2,435	9.6	9.6	6.8	1,474
	Early Stage Smokers	7.9	7.9	5.7	1,196	3.1	3.1	1.7	486
	Established Smokers	2.4	2.4	1.1	360	0.8	0.8	0.0	117
	Total	100.0	100.0		15,101	100.0	100.0		15,426
BALTIMORE CITY	Not Open to Smoking	49.5	49.5	39.9	7,722	60.1	60.1	53.1	9,347
	Open to Smoking	9.2	9.2	6.5	1,427	10.2	10.2	7.2	1,581
	Prior Experimenters	29.7	29.7	22.7	4,623	22.4	22.4	16.1	3,493
	Early Stage Smokers	10.3	10.3	6.6	1,601	6.7	6.7	2.9	1,040
	Established Smokers	1.4	1.4	0.1	218	0.6	0.6	0.1	99
	Total	100.0	100.0		15,590	100.0	100.0		15,560
BALTIMORE COUNTY	Not Open to Smoking	61.5	61.5	52.2	13,246	72.7	72.7	68.2	15,258
	Open to Smoking	16.0	16.0	14.0	3,443	12.1	12.1	10.1	2,540
	Prior Experimenters	15.5	15.5	8.7	3,329	11.9	11.9	8.1	2,499
	Early Stage Smokers	5.8	5.8	2.2	1,248	2.5	2.5	1.6	518
	Established Smokers	1.3	1.3	0.0	282	0.8	0.8	0.1	178
	Total	100.0	100.0		21,546	100.0	100.0		20,993
CALVERT	Not Open to Smoking	57.5	57.5	51.6	1,873	71.8	71.8	67.3	2,703
	Open to Smoking	17.4	17.4	14.1	566	14.2	14.2	10.8	534
	Prior Experimenters	15.0	15.0	11.4	487	10.0	10.0	6.6	376
	Early Stage Smokers	8.2	8.2	5.7	266	3.6	3.6	1.9	136
	Established Smokers	2.0	2.0	0.6	66	0.4	0.4	0.2	15
	Total	100.0	100.0		3,258	100.0	100.0		3,764
CAROLINE	Not Open to Smoking	53.5	53.5	47.1	602	61.1	61.1	58.6	687
	Open to Smoking	13.0	13.0	10.3	147	14.5	14.5	11.7	163
	Prior Experimenters	18.9	18.9	15.3	213	16.6	16.6	13.2	187
	Early Stage Smokers	12.3	12.3	8.8	138	6.5	6.5	4.2	73
	Established Smokers	2.4	2.4	0.8	27	1.4	1.4	0.9	15
	Total	100.0	100.0		1,127	100.0	100.0		1,125
CARROLL	Not Open to Smoking	69.2	69.2	63.3	4,022	74.3	74.3	71.3	4,653
	Open to Smoking	15.1	15.1	11.9	876	15.8	15.8	14.7	990
	Prior Experimenters	10.5	10.5	7.7	609	6.2	6.2	4.5	386
	Early Stage Smokers	3.8	3.8	2.0	222	2.4	2.4	1.0	152
	Established Smokers	1.4	1.4	0.0	81	1.3	1.3	0.4	81
	Total	100.0	100.0		5,810	100.0	100.0		6,263
CECIL	Not Open to Smoking	52.1	52.1	46.1	1,662	68.8	68.8	62.5	2,440
	Open to Smoking	14.3	14.3	11.7	455	12.2	12.2	10.2	434
	Prior Experimenters	21.5	21.5	17.4	686	12.3	12.3	9.6	436
	Early Stage Smokers	9.5	9.5	7.0	302	4.4	4.4	1.1	157
	Established Smokers	2.6	2.6	1.4	83	2.2	2.2	0.5	77

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Total	100.0	100.0		3,188	100.0	100.0		3,544
CHARLES	Not Open to Smoking	55.7	55.7	49.4	2,571	70.8	70.8	66.1	4,029
	Open to Smoking	15.8	15.8	13.9	731	15.3	15.3	12.6	870
	Prior Experimenters	18.1	18.1	14.1	838	12.2	12.2	9.2	697
	Early Stage Smokers	9.5	9.5	6.6	439	1.5	1.5	0.7	84
	Established Smokers	0.9	0.9	0.1	40	0.2	0.2	0.0	14
	Total	100.0	100.0		4,619	100.0	100.0		5,695
DORCHESTER	Not Open to Smoking	51.1	51.1	44.6	510	62.2	62.2	59.1	567
	Open to Smoking	15.8	15.8	13.0	158	14.0	14.0	10.4	128
	Prior Experimenters	20.8	20.8	16.5	207	16.8	16.8	13.7	153
	Early Stage Smokers	11.3	11.3	8.1	113	5.6	5.6	2.6	51
	Established Smokers	1.0	1.0	0.1	10	1.3	1.3	0.0	12
	Total	100.0	100.0		998	100.0	100.0		912
FREDERICK	Not Open to Smoking	60.1	60.1	54.2	4,440	76.7	76.7	72.3	6,493
	Open to Smoking	16.6	16.6	13.9	1,222	13.5	13.5	11.3	1,139
	Prior Experimenters	13.9	13.9	11.0	1,024	7.1	7.1	4.5	601
	Early Stage Smokers	8.2	8.2	6.3	609	2.1	2.1	1.0	176
	Established Smokers	1.2	1.2	0.2	90	0.7	0.7	0.2	55
	Total	100.0	100.0		7,385	100.0	100.0		8,465
GARRETT	Not Open to Smoking	55.9	55.9	49.0	561	65.9	65.9	54.1	714
	Open to Smoking	15.4	15.4	11.9	155	13.7	13.7	11.7	149
	Prior Experimenters	18.6	18.6	13.9	186	11.7	11.7	8.5	127
	Early Stage Smokers	8.7	8.7	5.7	87	5.4	5.4	0.9	59
	Established Smokers	1.4	1.4	0.2	14	3.2	3.2	0.9	35
	Total	100.0	100.0		1,003	100.0	100.0		1,082
HARFORD	Not Open to Smoking	54.6	54.6	49.1	4,391	72.3	72.3	65.1	6,131
	Open to Smoking	17.2	17.2	14.7	1,385	15.0	15.0	11.4	1,270
	Prior Experimenters	17.3	17.3	13.8	1,392	9.9	9.9	5.5	839
	Early Stage Smokers	9.3	9.3	6.5	751	2.3	2.3	0.7	197
	Established Smokers	1.5	1.5	0.8	123	0.5	0.5	0.0	44
	Total	100.0	100.0		8,042	100.0	100.0		8,481
HOWARD	Not Open to Smoking	66.7	66.7	65.5	6,243	76.5	76.5	72.5	8,390
	Open to Smoking	17.9	17.9	16.1	1,677	14.8	14.8	12.6	1,623
	Prior Experimenters	11.0	11.0	8.7	1,027	6.9	6.9	4.5	759
	Early Stage Smokers	3.8	3.8	2.6	352	1.4	1.4	0.6	158
	Established Smokers	0.6	0.6	0.4	55	0.3	0.3	0.0	37
	Total	100.0	100.0		9,354	100.0	100.0		10,968
KENT	Not Open to Smoking	53.9	53.9	48.0	304	63.5	63.5	55.7	273
	Open to Smoking	17.1	17.1	14.3	96	12.9	12.9	9.4	55
	Prior Experimenters	20.2	20.2	15.6	114	17.1	17.1	12.7	73
	Early Stage Smokers	7.1	7.1	4.6	40	4.6	4.6	3.4	20
	Established Smokers	1.7	1.7	0.5	10	1.9	1.9	0.0	8
	Total	100.0	100.0		564	100.0	100.0		429
MONTGOMERY	Not Open to Smoking	67.3	67.3	58.0	17,983	75.4	75.4	71.0	21,313
	Open to Smoking	16.7	16.7	12.4	4,451	13.2	13.2	11.5	3,745
	Prior Experimenters	12.0	12.0	7.4	3,199	8.1	8.1	4.9	2,292
	Early Stage Smokers	3.5	3.5	1.9	941	2.1	2.1	0.9	591
	Established Smokers	0.6	0.6	0.1	149	1.1	1.1	0.4	325

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Total	100.0	100.0		26,722	100.0	100.0		28,266
PRINCE GEORGE'S	Not Open to Smoking	57.8	57.8	52.4	13,623	66.0	66.0	59.2	16,862
	Open to Smoking	16.8	16.8	10.0	3,965	13.6	13.6	10.2	3,468
	Prior Experimenters	19.6	19.6	16.5	4,631	16.3	16.3	12.0	4,174
	Early Stage Smokers	5.5	5.5	1.5	1,304	3.7	3.7	2.0	951
	Established Smokers	0.2	0.2	0.0	59	0.4	0.4	0.1	112
	Total	100.0	100.0		23,581	100.0	100.0		25,566
QUEEN ANNE'S	Not Open to Smoking	59.9	59.9	53.7	870	74.0	74.0	68.9	1,176
	Open to Smoking	16.5	16.5	13.9	240	11.4	11.4	10.0	182
	Prior Experimenters	13.1	13.1	9.3	190	9.9	9.9	7.9	158
	Early Stage Smokers	8.9	8.9	5.7	130	3.2	3.2	2.0	51
	Established Smokers	1.5	1.5	0.4	22	1.4	1.4	0.8	23
	Total	100.0	100.0		1,453	100.0	100.0		1,590
SOMERSET	Not Open to Smoking	47.3	47.3	40.8	270	58.6	58.6	49.0	369
	Open to Smoking	9.4	9.4	6.1	53	10.3	10.3	6.0	65
	Prior Experimenters	23.8	23.8	18.4	136	23.6	23.6	15.2	149
	Early Stage Smokers	16.8	16.8	12.6	96	6.4	6.4	4.7	40
	Established Smokers	2.6	2.6	0.7	15	1.1	1.1	0.0	7
	Total	100.0	100.0		571	100.0	100.0		630
ST. MARY'S	Not Open to Smoking	55.6	55.6	50.8	1,575	74.6	74.6	68.4	2,417
	Open to Smoking	17.5	17.5	14.6	496	13.2	13.2	11.5	427
	Prior Experimenters	18.5	18.5	14.7	524	8.8	8.8	6.1	284
	Early Stage Smokers	6.7	6.7	4.5	190	2.9	2.9	0.7	93
	Established Smokers	1.6	1.6	0.6	44	0.7	0.7	0.0	21
	Total	100.0	100.0		2,830	100.0	100.0		3,242
TALBOT	Not Open to Smoking	59.1	59.1	52.8	517	58.3	58.3	55.9	522
	Open to Smoking	13.9	13.9	11.7	122	20.1	20.1	18.7	179
	Prior Experimenters	16.6	16.6	13.0	145	15.4	15.4	13.8	138
	Early Stage Smokers	8.1	8.1	4.2	71	5.0	5.0	4.4	45
	Established Smokers	2.3	2.3	0.5	20	1.2	1.2	1.0	11
	Total	100.0	100.0		875	100.0	100.0		895
WASHINGTON	Not Open to Smoking	51.2	51.2	43.6	2,110	65.8	65.8	61.6	2,847
	Open to Smoking	13.3	13.3	9.7	550	13.6	13.6	11.0	589
	Prior Experimenters	21.9	21.9	17.3	905	14.9	14.9	10.4	643
	Early Stage Smokers	11.6	11.6	8.0	480	5.0	5.0	3.7	217
	Established Smokers	1.9	1.9	0.3	79	0.7	0.7	0.3	32
	Total	100.0	100.0		4,125	100.0	100.0		4,329
WICOMICO	Not Open to Smoking	55.8	55.8	49.9	1,576	62.0	62.0	58.6	1,599
	Open to Smoking	13.1	13.1	10.7	369	13.7	13.7	12.3	352
	Prior Experimenters	18.3	18.3	15.3	517	17.2	17.2	15.8	443
	Early Stage Smokers	10.5	10.5	6.9	298	6.6	6.6	4.2	170
	Established Smokers	2.2	2.2	1.0	62	0.6	0.6	0.0	15
	Total	100.0	100.0		2,823	100.0	100.0		2,579
WORCESTER	Not Open to Smoking	57.9	57.9	52.0	786	66.8	66.8	56.8	899
	Open to Smoking	12.0	12.0	9.7	164	14.5	14.5	11.6	195
	Prior Experimenters	20.2	20.2	15.9	275	13.4	13.4	8.6	180
	Early Stage Smokers	9.4	9.4	6.1	127	4.5	4.5	2.5	61
	Established Smokers	0.4	0.4	0.0	6	0.8	0.8	0.0	11

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
MARYLAND STATE	Total	100.0	100.0		1,358	100.0	100.0		1,345
	Not Open to Smoking	59.4	59.4	56.8	97,481	70.5	70.5	68.9	122,082
	Open to Smoking	15.5	15.5	14.1	25,358	13.4	13.4	12.6	23,179
	Prior Experimenters	17.1	17.1	15.4	28,091	12.0	12.0	10.8	20,796
	Early Stage Smokers	6.8	6.8	5.9	11,186	3.3	3.3	2.7	5,648
	Established Smokers	1.2	1.2	0.9	1,957	0.8	0.8	0.6	1,362
	Total	100.0	100.0		164,074	100.0	100.0		173,067

Source: 2000 and 2006 Maryland YTS

These data represent underage youth only

Table B-26. High School Smoking Uptake by Category and Jurisdiction, 2000 and 2006

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
ALLEGANY	Not Open to Smoking	23.5	20.6	26.4	713	45.2	37.8	52.5	1,293
	Open to Smoking	7.5	5.9	9.0	227	7.6	5.6	9.7	219
	Prior Experimenters	32.0	29.0	34.9	968	23.3	21.1	25.6	668
	Early Stage Smokers	18.3	15.8	20.8	555	14.0	10.4	17.7	402
	Established Smokers	18.7	15.8	21.6	567	9.8	7.6	12.0	281
	Total	100.0			3,030	100.0			2,863
ANNE ARUNDEL	Not Open to Smoking	29.8	26.7	32.9	5,770	47.1	44.8	49.5	9,837
	Open to Smoking	9.7	8.0	11.3	1,873	11.1	9.7	12.5	2,311
	Prior Experimenters	30.3	27.9	32.8	5,876	24.4	21.9	26.8	5,083
	Early Stage Smokers	16.9	14.9	18.8	3,266	9.7	8.3	11.1	2,027
	Established Smokers	13.3	11.0	15.7	2,578	7.7	6.1	9.4	1,609
	Total	100.0			19,362	100.0			20,866
BALTIMORE CITY	Not Open to Smoking	33.8	29.9	37.7	6,598	48.6	43.9	53.3	9,335
	Open to Smoking	8.2	6.2	10.2	1,600	8.8	7.3	10.4	1,698
	Prior Experimenters	43.5	39.7	47.2	8,483	33.1	29.9	36.2	6,352
	Early Stage Smokers	10.5	8.1	12.9	2,046	7.7	5.5	9.8	1,474
	Established Smokers	4.0	2.4	5.7	789	1.9	1.3	2.4	359
	Total	100.0			19,516	100.0			19,218
BALTIMORE COUNTY	Not Open to Smoking	32.1	28.7	35.4	8,563	46.3	42.8	49.7	13,563
	Open to Smoking	8.9	7.5	10.3	2,375	10.9	8.7	13.0	3,186
	Prior Experimenters	33.3	30.3	36.3	8,892	26.1	23.2	29.0	7,658
	Early Stage Smokers	13.0	11.7	14.4	3,478	10.8	9.4	12.2	3,165
	Established Smokers	12.6	9.2	16.1	3,373	6.0	4.1	7.8	1,747
	Total	100.0			26,682	100.0			29,319
CALVERT	Not Open to Smoking	31.2	27.1	35.3	1,291	46.4	42.4	50.4	2,482
	Open to Smoking	7.9	6.2	9.6	327	9.4	8.0	10.8	503
	Prior Experimenters	31.5	28.9	34.0	1,302	23.3	21.0	25.7	1,249
	Early Stage Smokers	16.5	14.2	18.7	681	11.6	9.9	13.2	620
	Established Smokers	13.0	10.5	15.5	537	9.3	6.7	12.0	499
	Total	100.0			4,139	100.0			5,353
CAROLINE	Not Open to Smoking	22.2	18.8	25.6	320	38.7	34.1	43.4	619
	Open to Smoking	7.0	5.4	8.6	101	8.5	7.0	9.9	135
	Prior Experimenters	32.7	29.9	35.4	471	28.2	23.6	32.8	451
	Early Stage Smokers	20.0	16.5	23.5	288	14.5	13.8	15.3	233
	Established Smokers	18.1	14.1	22.2	262	10.0	9.3	10.7	160
	Total	100.0			1,442	100.0			1,599
CARROLL	Not Open to Smoking	37.7	33.8	41.5	2,788	50.4	47.8	53.1	4,549
	Open to Smoking	9.2	7.5	10.9	678	12.3	11.5	13.1	1,109
	Prior Experimenters	25.8	23.5	28.0	1,907	18.6	17.4	19.7	1,673
	Early Stage Smokers	15.3	12.9	17.6	1,129	11.8	10.1	13.4	1,060
	Established Smokers	12.2	9.6	14.7	900	6.9	6.2	7.7	626
	Total	100.0			7,402	100.0			9,017
CECIL	Not Open to Smoking	28.8	25.2	32.3	1,085	39.8	38.2	41.4	1,823
	Open to Smoking	8.8	7.0	10.5	331	8.5	8.0	9.1	390
	Prior Experimenters	29.1	26.3	31.9	1,097	27.2	25.3	29.0	1,245
	Early Stage Smokers	18.2	15.3	21.1	687	13.2	11.9	14.4	603
	Established Smokers	15.2	12.3	18.1	573	11.4	9.7	13.0	520

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Total	100.0			3,773	100.0			4,582
CHARLES	Not Open to Smoking	28.7	25.1	32.3	1,807	47.3	42.5	52.1	3,815
	Open to Smoking	8.6	6.5	10.6	539	10.5	9.3	11.6	845
	Prior Experimenters	32.7	30.1	35.3	2,059	25.6	22.8	28.3	2,062
	Early Stage Smokers	17.1	14.6	19.5	1,074	11.1	8.2	14.0	892
	Established Smokers	13.0	10.3	15.7	816	5.6	4.1	7.1	452
	Total	100.0			6,297	100.0			8,065
DORCHESTER	Not Open to Smoking	25.7	22.3	29.2	338	44.1	32.8	55.5	609
	Open to Smoking	7.3	5.0	9.6	96	8.5	5.7	11.3	117
	Prior Experimenters	38.0	34.3	41.7	499	27.7	21.1	34.3	382
	Early Stage Smokers	18.5	15.9	21.0	242	12.3	9.0	15.7	170
	Established Smokers	10.5	7.5	13.5	138	7.4	3.1	11.6	102
	Total	100.0			1,313	100.0			1,380
FREDERICK	Not Open to Smoking	30.1	26.9	33.4	2,804	48.0	44.6	51.3	5,472
	Open to Smoking	10.3	8.7	11.9	957	11.5	10.1	12.8	1,310
	Prior Experimenters	29.1	26.4	31.8	2,707	21.0	19.5	22.4	2,395
	Early Stage Smokers	17.4	15.2	19.5	1,616	11.8	9.9	13.7	1,347
	Established Smokers	13.1	10.5	15.7	1,220	7.8	6.0	9.6	888
	Total	100.0			9,304	100.0			11,412
GARRETT	Not Open to Smoking	25.3	22.0	28.6	319	40.3	39.1	41.5	544
	Open to Smoking	7.3	5.2	9.4	92	10.2	7.1	13.4	138
	Prior Experimenters	33.3	30.1	36.4	419	24.6	19.8	29.4	332
	Early Stage Smokers	17.6	15.0	20.1	221	16.0	12.8	19.1	216
	Established Smokers	16.5	13.6	19.4	208	8.9	5.3	12.5	121
	Total	100.0			1,260	100.0			1,351
HARFORD	Not Open to Smoking	26.3	23.6	29.1	2,547	47.8	45.0	50.5	5,345
	Open to Smoking	10.6	8.8	12.4	1,028	12.4	11.3	13.5	1,390
	Prior Experimenters	30.1	28.0	32.1	2,911	21.7	17.9	25.6	2,431
	Early Stage Smokers	17.1	15.1	19.1	1,654	11.1	10.2	12.0	1,240
	Established Smokers	15.9	13.5	18.3	1,540	7.0	5.6	8.5	787
	Total	100.0			9,681	100.0			11,193
HOWARD	Not Open to Smoking	38.1	34.8	41.4	4,252	52.3	48.3	56.3	7,285
	Open to Smoking	14.1	12.1	16.1	1,574	13.6	11.9	15.3	1,889
	Prior Experimenters	24.5	22.2	26.8	2,736	20.3	18.3	22.4	2,829
	Early Stage Smokers	14.4	12.2	16.6	1,611	9.2	7.4	11.1	1,285
	Established Smokers	8.9	6.9	10.9	995	4.6	3.5	5.7	639
	Total	100.0			11,168	100.0			13,927
KENT	Not Open to Smoking	21.0	16.9	25.0	158	30.6	30.6	30.6	215
	Open to Smoking	7.7	5.2	10.1	58	12.0	12.0	12.0	84
	Prior Experimenters	34.1	29.4	38.7	256	28.4	28.4	28.4	200
	Early Stage Smokers	24.9	19.6	30.2	187	16.5	16.5	16.5	116
	Established Smokers	12.4	9.3	15.5	93	12.4	12.4	12.4	88
	Total	100.0			753	100.0			703
MONTGOMERY	Not Open to Smoking	36.4	33.2	39.6	11,852	47.0	43.7	50.3	17,989
	Open to Smoking	13.5	11.8	15.3	4,407	14.5	13.1	15.9	5,545
	Prior Experimenters	28.7	26.0	31.4	9,359	24.2	22.0	26.4	9,265
	Early Stage Smokers	14.2	12.5	15.8	4,613	9.9	8.0	11.8	3,805
	Established Smokers	7.2	5.9	8.4	2,335	4.4	3.4	5.5	1,693

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Total	100.0			32,567	100.0			38,297
PRINCE GEORGE'S	Not Open to Smoking	34.3	31.4	37.3	10,320	50.2	47.8	52.7	17,992
	Open to Smoking	9.9	8.5	11.2	2,962	11.5	10.4	12.7	4,130
	Prior Experimenters	38.8	35.2	42.4	11,657	29.3	27.2	31.5	10,509
	Early Stage Smokers	12.3	9.7	14.8	3,683	6.9	5.8	8.0	2,467
	Established Smokers	4.7	3.5	5.9	1,421	2.0	1.1	3.0	724
	Total	100.0			30,043	100.0			35,822
QUEEN ANNE'S	Not Open to Smoking	26.6	23.8	29.4	459	43.4	38.6	48.3	1,000
	Open to Smoking	9.2	7.2	11.1	158	9.3	8.5	10.2	215
	Prior Experimenters	32.3	29.6	35.0	559	22.6	21.0	24.3	521
	Early Stage Smokers	17.5	15.0	20.0	302	13.3	10.0	16.7	307
	Established Smokers	14.5	11.8	17.1	250	11.3	9.0	13.7	261
	Total	100.0			1,728	100.0			2,303
SOMERSET	Not Open to Smoking	20.1	15.5	24.7	156	39.2	34.2	44.3	279
	Open to Smoking	8.3	5.5	11.1	64	7.7	2.1	13.3	55
	Prior Experimenters	31.1	26.4	35.9	241	32.4	26.4	38.4	231
	Early Stage Smokers	23.7	20.5	26.9	184	12.6	9.2	16.1	90
	Established Smokers	16.7	10.1	23.4	130	8.0	6.0	10.1	57
	Total	100.0			775	100.0			712
ST. MARY'S	Not Open to Smoking	30.5	27.1	33.9	1,148	50.0	43.6	56.3	2,372
	Open to Smoking	8.2	6.2	10.1	307	8.6	6.7	10.5	408
	Prior Experimenters	29.9	26.9	32.8	1,123	25.5	20.0	31.0	1,208
	Early Stage Smokers	16.2	13.8	18.6	609	9.6	7.6	11.6	457
	Established Smokers	15.3	12.1	18.6	576	6.3	3.6	9.0	300
	Total	100.0			3,763	100.0			4,744
TALBOT	Not Open to Smoking	25.0	21.6	28.3	286	33.1	31.7	34.6	426
	Open to Smoking	9.9	7.7	12.0	113	12.1	10.7	13.5	156
	Prior Experimenters	28.2	24.6	31.7	323	27.5	23.8	31.1	354
	Early Stage Smokers	18.3	15.5	21.1	210	17.5	13.9	21.1	226
	Established Smokers	18.7	14.7	22.6	214	9.8	9.7	9.9	126
	Total	100.0			1,148	100.0			1,288
WASHINGTON	Not Open to Smoking	28.4	25.0	31.8	1,470	41.3	37.9	44.7	2,467
	Open to Smoking	8.5	6.9	10.1	440	10.2	8.2	12.1	607
	Prior Experimenters	30.0	27.7	32.4	1,554	25.9	21.5	30.2	1,544
	Early Stage Smokers	17.2	15.2	19.1	888	12.9	11.6	14.3	773
	Established Smokers	15.9	13.6	18.1	821	9.7	7.3	12.1	578
	Total	100.0			5,174	100.0			5,969
WICOMICO	Not Open to Smoking	25.8	22.6	29.0	885	42.9	39.7	46.1	1,608
	Open to Smoking	8.3	6.2	10.4	285	9.7	7.9	11.4	362
	Prior Experimenters	31.8	28.8	34.9	1,092	30.7	24.5	36.9	1,150
	Early Stage Smokers	18.6	15.9	21.3	638	11.3	9.1	13.4	422
	Established Smokers	15.5	12.3	18.6	530	5.5	4.4	6.6	207
	Total	100.0			3,431	100.0			3,750
WORCESTER	Not Open to Smoking	30.3	26.3	34.2	587	43.0	37.2	48.7	936
	Open to Smoking	8.8	6.4	11.2	171	8.9	7.7	10.1	194
	Prior Experimenters	31.1	27.7	34.6	604	28.3	24.7	31.8	616
	Early Stage Smokers	15.4	12.8	17.9	299	12.2	10.7	13.6	265
	Established Smokers	14.4	11.5	17.3	279	7.7	6.9	8.5	168

Jurisdiction	Smoking Uptake Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
MARYLAND STATE	Total	100.0			1,939	100.0			2,180
	Not Open to Smoking	32.3	31.3	33.3	66,517	47.7	46.4	48.4	111,858
	Open to Smoking	10.1	9.6	10.6	20,765	11.4	11.0	11.9	26,997
	Prior Experimenters	32.6	31.7	33.6	67,097	25.6	24.8	26.4	60,408
	Early Stage Smokers	14.7	14.0	15.3	30,162	10.0	9.5	10.5	23,659
	Established Smokers	10.3	9.6	10.9	21,146	5.5	5.1	5.9	12,991
	Total	100.0			205,687	100.0			235,913

Source: 2000 and 2006 Maryland YTS
These data represent underage youth only

Table B-27. Middle School Stages of Initiation by Category and Jurisdiction, 2000 and 2006

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
ALLEGANY	Precontemplation	69.0	65.1	72.9	1,604	78.0	74.0	82.0	1,562
	Contemplation	23.2	20.3	26.1	538	16.7	12.9	20.6	335
	Preparation	4.2	2.6	5.8	98	2.1	1.1	3.1	43
	Action	1.9	0.9	2.9	45	2.0	1.4	2.6	40
	Maintenance	1.7	0.4	2.9	39	1.1	0.5	1.7	23
	Total	100.0			2,324	100.0			2,003
ANNE ARUNDEL	Precontemplation	70.1	65.7	74.5	11,387	79.7	76.1	83.3	13,061
	Contemplation	22.7	19.4	26.1	3,688	17.5	14.9	20.1	2,876
	Preparation	3.8	2.6	5.0	619	1.5	0.4	2.6	249
	Action	1.1	0.4	1.7	173	0.7	0.2	1.3	121
	Maintenance	2.3	1.1	3.4	366	0.5	0.0	1.1	86
	Total	100.0			16,232	100.0			16,392
BALTIMORE CITY	Precontemplation	67.9	60.8	75.1	12,746	74.7	70.0	79.3	12,715
	Contemplation	24.0	19.4	28.7	4,508	20.8	17.1	24.4	3,538
	Preparation	5.5	4.0	7.1	1,040	3.5	2.3	4.6	588
	Action	1.4	0.4	2.4	260	0.7	0.0	1.4	115
	Maintenance	1.1	0.0	2.3	205	0.4	0.0	0.8	66
	Total	100.0			18,760	100.0			17,022
BALTIMORE COUNTY	Precontemplation	73.4	66.8	80.1	17,174	82.1	78.2	86.1	18,373
	Contemplation	22.7	18.1	27.2	5,299	15.1	11.6	18.6	3,379
	Preparation	1.4	0.2	2.6	322	1.5	0.8	2.3	342
	Action	1.1	0.3	2.0	263	0.4	0.1	0.8	99
	Maintenance	1.4	0.0	2.8	324	0.8	0.1	1.5	178
	Total	100.0			23,383	100.0			22,371
CALVERT	Precontemplation	69.4	63.5	75.4	2,446	82.8	79.3	86.4	3,232
	Contemplation	22.9	18.4	27.4	807	14.5	11.8	17.3	566
	Preparation	3.8	2.3	5.3	134	1.6	1.0	2.2	64
	Action	1.7	0.8	2.6	60	0.6	0.1	1.1	24
	Maintenance	2.1	0.4	3.8	75	0.4	0.2	0.6	15
	Total	100.0			3,523	100.0			3,901
CAROLINE	Precontemplation	72.0	66.9	77.1	874	75.3	72.1	78.6	890
	Contemplation	20.0	16.1	24.0	243	19.5	17.6	21.4	230
	Preparation	2.3	1.4	3.2	28	2.3	0.9	3.7	27
	Action	3.2	1.2	5.2	39	1.7	1.6	1.8	20
	Maintenance	2.5	1.0	3.9	30	1.2	1.0	1.4	14
	Total	100.0			1,214	100.0			1,181
CARROLL	Precontemplation	78.9	74.3	83.5	4,933	81.7	78.4	84.9	5,366
	Contemplation	17.7	14.1	21.3	1,105	14.8	12.4	17.2	972
	Preparation	1.4	0.6	2.2	88	1.2	0.6	1.9	81
	Action	1.0	0.4	1.7	65	0.8	0.4	1.2	52
	Maintenance	0.9	0.0	2.2	59	1.5	0.5	2.4	97
	Total	100.0			6,251	100.0			6,570
CECIL	Precontemplation	69.1	64.3	74.0	2,325	78.5	74.9	82.2	2,966
	Contemplation	22.4	19.0	25.9	754	15.7	13.9	17.5	594
	Preparation	3.6	2.4	4.7	120	2.1	1.3	3.0	80
	Action	2.3	1.3	3.3	77	1.7	0.0	3.5	62

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Maintenance	2.6	1.3	3.8	87	2.0	0.2	3.8	75
	Total	100.0			3,364	100.0			3,777
CHARLES	Precontemplation	71.0	65.8	76.3	3,558	84.8	80.8	88.8	5,131
	Contemplation	22.3	18.6	26.0	1,116	13.8	10.4	17.2	835
	Preparation	4.2	2.3	6.0	208	1.0	0.4	1.7	63
	Action	1.4	0.6	2.2	69	0.1	0.0	0.5	9
	Maintenance	1.1	0.3	2.0	57	0.2	0.0	0.6	14
	Total	100.0			5,009	100.0			6,052
DORCHESTER	Precontemplation	64.8	58.8	70.8	717	77.2	74.4	80.0	750
	Contemplation	27.1	22.4	31.9	300	18.5	14.8	22.3	180
	Preparation	4.7	2.8	6.6	52	2.1	1.1	3.1	21
	Action	2.2	0.9	3.6	25	1.2	0.0	2.7	11
	Maintenance	1.1	0.2	2.0	12	1.0	0.6	1.4	10
	Total	100.0			1,106	100.0			971
FREDERICK	Precontemplation	73.7	68.3	79.1	5,907	84.1	81.1	87.2	7,578
	Contemplation	20.9	16.9	24.9	1,674	13.8	11.5	16.0	1,238
	Preparation	2.3	1.3	3.2	181	1.1	0.3	1.8	96
	Action	1.6	0.7	2.4	125	0.5	0.1	0.9	44
	Maintenance	1.6	0.6	2.6	127	0.6	0.0	1.1	50
	Total	100.0			8,013	100.0			9,005
GARRETT	Precontemplation	69.7	63.6	75.7	739	76.5	67.9	85.0	869
	Contemplation	23.5	18.9	28.0	249	16.2	13.4	19.0	184
	Preparation	2.9	1.2	4.5	31	2.3	0.5	4.2	26
	Action	2.7	1.0	4.3	28	2.4	0.3	4.5	27
	Maintenance	1.3	0.2	2.3	14	2.6	0.8	4.5	30
	Total	100.0			1,061	100.0			1,137
HARFORD	Precontemplation	69.0	64.1	73.8	5,895	83.0	79.3	86.8	7,261
	Contemplation	24.3	20.6	28.0	2,077	14.9	12.2	17.7	1,304
	Preparation	3.5	2.2	4.9	303	1.2	0.3	2.1	106
	Action	1.8	0.8	2.8	155	0.4	0.0	1.0	39
	Maintenance	1.4	0.7	2.0	118	0.4	0.0	1.0	36
	Total	100.0			8,549	100.0			8,746
HOWARD	Precontemplation	76.3	73.4	79.1	7,598	85.5	82.5	88.5	9,851
	Contemplation	20.6	17.9	23.3	2,051	13.4	11.0	15.9	1,548
	Preparation	1.7	1.0	2.4	169	0.4	0.0	0.7	42
	Action	1.0	0.5	1.4	96	0.3	0.0	0.7	38
	Maintenance	0.5	0.2	0.7	48	0.4	0.0	0.8	45
	Total	100.0			9,961	100.0			11,525
KENT	Precontemplation	69.2	65.2	73.3	427	74.2	68.1	80.3	348
	Contemplation	25.5	22.1	28.9	157	20.5	17.3	23.8	96
	Preparation	2.6	0.9	4.3	16	2.8	2.3	3.3	13
	Action	1.2	0.3	2.1	8	0.7	0.0	1.8	3
	Maintenance	1.4	0.4	2.4	9	1.7	0.0	3.9	8
	Total	100.0			617	100.0			468
MONTGOMERY	Precontemplation	79.1	72.1	86.2	22,730	83.0	80.3	85.8	24,992
	Contemplation	18.2	11.8	24.5	5,227	14.5	12.1	16.9	4,371
	Preparation	1.6	0.5	2.7	457	1.2	0.6	1.9	367
	Action	0.4	0.2	0.6	127	0.3	0.0	0.7	92

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Maintenance	0.6	0.1	1.2	179	0.9	0.1	1.8	279
	Total	100.0			28,720	100.0			30,101
PRINCE GEORGE'S	Precontemplation	73.2	68.4	78.0	19,427	78.6	73.3	83.8	21,904
	Contemplation	22.8	19.0	26.7	6,058	18.8	14.5	23.1	5,245
	Preparation	2.9	1.5	4.2	759	1.6	0.7	2.4	438
	Action	0.9	0.0	1.9	243	0.8	0.1	1.6	228
	Maintenance	0.2	0.0	0.6	59	0.2	0.0	0.5	64
	Total	100.0			26,544	100.0			27,879
QUEEN ANNE'S	Precontemplation	72.0	66.8	77.3	1,146	82.9	78.1	87.7	1,394
	Contemplation	21.0	17.9	24.2	335	13.9	10.4	17.5	235
	Preparation	2.9	1.4	4.4	46	1.0	0.1	1.9	17
	Action	2.4	0.9	3.8	38	0.8	0.3	1.3	14
	Maintenance	1.7	0.5	2.8	26	1.4	0.9	1.8	23
	Total	100.0			1,591	100.0			1,682
SOMERSET	Precontemplation	63.5	57.7	69.2	398	75.1	68.0	82.2	507
	Contemplation	23.2	19.0	27.3	145	19.5	15.9	23.0	131
	Preparation	7.0	4.3	9.7	44	2.6	1.1	4.2	18
	Action	3.7	1.9	5.6	23	1.5	1.1	2.0	10
	Maintenance	2.7	0.8	4.6	17	1.3	0.0	3.7	8
	Total	100.0			627	100.0			675
ST. MARY'S	Precontemplation	69.0	64.4	73.6	2,148	83.8	77.6	90.0	2,977
	Contemplation	25.3	21.7	28.9	787	13.8	9.6	17.9	489
	Preparation	3.0	1.6	4.5	95	1.3	0.0	3.0	47
	Action	1.1	0.4	1.7	33	0.7	0.1	1.2	24
	Maintenance	1.6	0.6	2.6	50	0.4	0.0	0.9	16
	Total	100.0			3,113	100.0			3,552
TALBOT	Precontemplation	72.8	67.7	77.9	689	71.1	69.7	72.4	677
	Contemplation	20.7	17.7	23.8	196	23.8	22.3	25.4	227
	Preparation	2.4	1.4	3.4	23	2.6	2.2	2.9	24
	Action	1.7	0.0	3.4	16	1.2	0.9	1.5	12
	Maintenance	2.3	0.6	3.9	21	1.3	1.1	1.5	12
	Total	100.0			947	100.0			952
WASHINGTON	Precontemplation	66.6	60.5	72.6	2,938	78.9	75.8	82.0	3,584
	Contemplation	24.3	19.8	28.7	1,071	17.7	15.0	20.4	802
	Preparation	4.0	2.6	5.4	176	2.1	1.3	2.9	95
	Action	3.1	1.5	4.8	139	0.7	0.2	1.2	31
	Maintenance	2.0	0.6	3.5	90	0.7	0.2	1.2	31
	Total	100.0			4,414	100.0			4,543
WICOMICO	Precontemplation	70.2	65.1	75.2	2,089	76.1	74.2	78.0	2,074
	Contemplation	22.1	18.7	25.5	657	18.9	17.2	20.6	515
	Preparation	2.7	1.2	4.2	81	2.6	1.2	3.9	70
	Action	2.5	1.3	3.7	74	1.5	0.0	3.2	42
	Maintenance	2.6	1.4	3.8	76	0.8	0.4	1.3	23
	Total	100.0			2,977	100.0			2,724
WORCESTER	Precontemplation	74.4	69.6	79.2	1,104	77.4	68.9	86.0	1,098
	Contemplation	19.6	16.0	23.3	291	18.7	11.9	25.6	265
	Preparation	2.8	1.7	3.9	42	2.0	1.5	2.5	28
	Action	2.7	1.1	4.4	41	1.0	0.2	1.7	14

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Maintenance	0.4	0.0	1.0	6	0.8	0.0	1.7	12
	Total	100.0			1,484	100.0			1,417
MARYLAND STATE	Precontemplation	72.9	70.9	74.8	131,002	80.8	79.5	82.0	149,159
	Contemplation	21.9	20.3	23.4	39,336	16.3	15.3	17.4	30,155
	Preparation	2.9	2.4	3.3	5,130	1.6	1.3	1.9	2,947
	Action	1.2	1.0	1.5	2,222	0.6	0.5	0.8	1,172
	Maintenance	1.2	0.9	1.5	2,095	0.7	0.5	0.9	1,215
	Total	100.0			179,784	100.0			184,647

Source: 2000 and 2006 Maryland YTS
These data represent underage youth only

Table B-28. High School Stages of Initiation by Category and Jurisdiction, 2000 and 2006

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
ALLEGANY	Precontemplation	44.1	41.0	47.2	1,319	60.4	53.5	67.3	1,724
	Contemplation	22.9	20.4	25.4	686	19.6	16.1	23.1	560
	Preparation	6.2	4.6	7.7	184	4.8	3.4	6.1	136
	Action	6.9	5.4	8.4	206	5.4	3.7	7.1	153
	Maintenance	19.9	17.0	22.8	596	9.9	7.8	12.0	283
	Total	100.0			2,992	100.0			2,857
ANNE ARUNDEL	Precontemplation	49.1	45.8	52.3	9,521	63.2	59.7	66.8	13,467
	Contemplation	26.0	23.8	28.2	5,047	21.7	19.6	23.7	4,614
	Preparation	5.6	4.6	6.6	1,094	4.6	3.8	5.4	982
	Action	5.9	4.8	7.1	1,149	3.5	2.8	4.2	743
	Maintenance	13.4	11.0	15.7	2,594	7.0	5.4	8.7	1,494
	Total	100.0			19,405	100.0			21,301
BALTIMORE CITY	Precontemplation	66.7	62.6	70.8	13,998	73.6	70.7	76.6	14,979
	Contemplation	20.4	17.3	23.6	4,290	19.8	17.5	22.1	4,032
	Preparation	7.0	4.6	9.3	1,459	2.9	2.2	3.7	600
	Action	2.6	1.6	3.6	541	1.9	1.2	2.6	386
	Maintenance	3.3	2.0	4.7	703	1.7	1.2	2.2	344
	Total	100.0			20,991	100.0			20,340
BALTIMORE COUNTY	Precontemplation	52.8	48.8	56.8	14,405	65.1	62.1	68.0	19,712
	Contemplation	26.1	23.6	28.5	7,110	21.7	20.0	23.4	6,575
	Preparation	5.1	4.3	6.0	1,402	3.9	3.3	4.5	1,188
	Action	3.5	2.5	4.5	955	3.5	2.8	4.2	1,058
	Maintenance	12.5	9.5	15.4	3,395	5.8	3.9	7.7	1,765
	Total	100.0			27,267	100.0			30,299
CALVERT	Precontemplation	49.2	45.3	53.0	2,026	61.3	58.6	63.9	3,319
	Contemplation	25.4	22.6	28.2	1,046	20.8	19.2	22.4	1,127
	Preparation	6.8	5.3	8.3	280	4.5	3.4	5.5	241
	Action	5.0	3.8	6.2	205	4.2	3.5	4.9	227
	Maintenance	13.7	11.4	16.0	564	9.3	6.6	12.1	504
	Total	100.0			4,120	100.0			5,418
CAROLINE	Precontemplation	43.0	38.5	47.5	621	58.5	57.6	59.4	950
	Contemplation	26.1	23.2	29.0	377	20.8	20.5	21.1	338
	Preparation	6.6	4.8	8.4	95	5.6	5.4	5.9	92
	Action	6.6	4.8	8.4	95	5.4	4.4	6.4	88
	Maintenance	17.7	13.7	21.6	255	9.6	9.5	9.8	157
	Total	100.0			1,444	100.0			1,625
CARROLL	Precontemplation	53.1	48.8	57.5	3,945	62.5	58.6	66.4	5,755
	Contemplation	23.9	21.6	26.2	1,772	21.9	19.3	24.4	2,014
	Preparation	6.1	4.7	7.5	454	5.1	4.0	6.2	472
	Action	5.0	3.8	6.3	372	4.0	3.2	4.9	371
	Maintenance	11.8	9.4	14.3	879	6.5	5.5	7.5	595
	Total	100.0			7,423	100.0			9,206
CECIL	Precontemplation	49.5	45.8	53.2	1,839	58.3	56.7	59.9	2,678
	Contemplation	22.1	19.3	24.9	820	20.5	19.1	21.9	941
	Preparation	6.8	5.0	8.7	254	5.0	4.6	5.3	228
	Action	5.2	3.8	6.5	191	4.9	3.8	6.0	225

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Maintenance	16.4	13.4	19.5	611	11.4	10.1	12.7	523
	Total	100.0			3,716	100.0			4,595
CHARLES	Precontemplation	48.5	44.3	52.7	3,051	65.3	61.6	69.0	5,395
	Contemplation	25.6	22.5	28.7	1,610	21.5	19.9	23.2	1,778
	Preparation	7.0	5.5	8.6	441	4.2	3.1	5.3	347
	Action	6.1	4.6	7.6	384	3.5	2.0	5.0	289
	Maintenance	12.8	10.0	15.5	802	5.5	4.0	7.0	454
	Total	100.0			6,288	100.0			8,263
DORCHESTER	Precontemplation	51.9	47.5	56.3	703	64.4	57.8	71.0	909
	Contemplation	25.8	21.5	30.1	350	19.7	18.7	20.8	278
	Preparation	7.3	5.4	9.2	99	4.6	3.8	5.3	64
	Action	5.3	3.6	7.1	72	4.2	1.5	6.9	59
	Maintenance	9.7	7.0	12.5	132	7.1	2.9	11.3	100
	Total	100.0			1,356	100.0			1,410
FREDERICK	Precontemplation	46.9	43.6	50.2	4,373	60.4	57.3	63.5	7,061
	Contemplation	26.9	24.7	29.1	2,510	22.8	21.3	24.4	2,670
	Preparation	6.8	5.5	8.0	631	5.7	4.6	6.8	665
	Action	6.2	4.9	7.5	577	3.2	2.6	3.7	373
	Maintenance	13.3	10.8	15.8	1,237	7.9	6.0	9.8	920
	Total	100.0			9,328	100.0			11,690
GARRETT	Precontemplation	44.1	39.9	48.4	549	56.2	56.1	56.4	754
	Contemplation	26.8	23.5	30.1	334	22.9	17.9	28.0	308
	Preparation	6.7	5.0	8.3	83	6.0	5.3	6.8	81
	Action	5.1	3.7	6.5	63	5.4	3.3	7.5	72
	Maintenance	17.3	14.0	20.6	215	9.4	5.7	13.0	126
	Total	100.0			1,245	100.0			1,340
HARFORD	Precontemplation	45.4	42.6	48.3	4,395	62.5	60.7	64.3	7,123
	Contemplation	25.9	23.7	28.1	2,507	21.8	20.2	23.4	2,487
	Preparation	6.4	5.2	7.6	620	5.2	4.8	5.7	594
	Action	6.1	4.7	7.4	588	3.8	3.2	4.5	437
	Maintenance	16.2	13.7	18.6	1,566	6.6	5.3	8.0	756
	Total	100.0			9,677	100.0			11,398
HOWARD	Precontemplation	53.7	50.7	56.7	6,195	64.8	61.3	68.4	9,389
	Contemplation	28.6	26.0	31.2	3,299	24.1	22.0	26.1	3,486
	Preparation	5.2	4.0	6.4	597	4.3	3.3	5.3	621
	Action	4.3	3.1	5.6	502	2.6	2.0	3.2	380
	Maintenance	8.2	6.2	10.2	947	4.2	3.2	5.2	603
	Total	100.0			11,539	100.0			14,478
KENT	Precontemplation	38.9	34.5	43.3	292	49.1	49.1	49.1	350
	Contemplation	30.6	26.3	34.8	229	26.8	26.8	26.8	191
	Preparation	11.0	7.9	14.0	82	4.3	4.3	4.3	31
	Action	6.5	4.0	9.1	49	7.7	7.7	7.7	55
	Maintenance	13.0	10.1	16.0	98	12.1	12.1	12.1	86
	Total	100.0			750	100.0			713
MONTGOMERY	Precontemplation	53.8	51.3	56.3	18,111	62.1	59.7	64.4	24,899
	Contemplation	28.8	25.9	31.7	9,706	25.9	24.2	27.6	10,390
	Preparation	6.5	5.1	8.0	2,196	5.0	3.9	6.1	2,018
	Action	3.9	2.7	5.0	1,307	2.7	2.0	3.4	1,098

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Maintenance	7.0	5.7	8.3	2,361	4.3	3.2	5.4	1,712
	Total	100.0			33,681	100.0			40,117
PRINCE GEORGE'S	Precontemplation	62.9	60.0	65.9	20,278	71.6	69.2	74.0	26,657
	Contemplation	24.7	22.4	27.0	7,973	21.5	19.6	23.3	7,994
	Preparation	5.1	3.9	6.3	1,651	3.2	2.5	4.0	1,209
	Action	2.8	1.8	3.8	899	1.9	1.3	2.5	718
	Maintenance	4.4	3.1	5.8	1,426	1.7	0.9	2.6	640
	Total	100.0			32,226	100.0			37,218
QUEEN ANNE'S	Precontemplation	45.8	42.7	48.8	795	57.6	52.3	62.9	1,329
	Contemplation	25.7	22.8	28.5	445	22.1	21.4	22.8	509
	Preparation	8.4	6.8	10.0	146	4.9	1.8	8.0	113
	Action	5.8	4.0	7.7	101	4.7	4.1	5.4	109
	Maintenance	14.3	11.6	17.0	248	10.7	7.1	14.2	246
	Total	100.0			1,736	100.0			2,307
SOMERSET	Precontemplation	40.6	34.3	47.0	301	61.1	49.7	72.5	438
	Contemplation	26.0	20.1	32.0	193	20.8	15.2	26.5	149
	Preparation	8.1	5.6	10.6	60	4.5	2.1	6.8	32
	Action	7.5	4.9	10.2	56	6.0	3.6	8.5	43
	Maintenance	17.7	11.2	24.3	132	7.6	6.7	8.5	54
	Total	100.0			742	100.0			716
ST. MARY'S	Precontemplation	51.1	47.2	55.1	1,964	67.6	64.1	71.1	3,206
	Contemplation	22.7	20.1	25.4	874	19.3	18.6	20.0	914
	Preparation	5.7	4.2	7.2	217	4.1	3.9	4.2	192
	Action	6.3	4.9	7.8	243	2.8	2.2	3.4	133
	Maintenance	14.1	11.1	17.2	543	6.2	3.4	9.0	295
	Total	100.0			3,841	100.0			4,741
TALBOT	Precontemplation	41.2	38.1	44.3	483	49.2	44.5	53.8	652
	Contemplation	27.5	24.7	30.3	323	28.7	25.9	31.4	381
	Preparation	6.5	4.6	8.4	76	6.7	5.7	7.6	88
	Action	7.4	5.7	9.1	87	5.5	5.5	5.6	74
	Maintenance	17.4	13.9	21.0	204	9.9	9.0	10.9	132
	Total	100.0			1,173	100.0			1,327
WASHINGTON	Precontemplation	47.5	44.1	51.0	2,414	56.6	52.1	61.1	3,403
	Contemplation	22.8	20.3	25.4	1,159	24.3	22.0	26.7	1,462
	Preparation	7.1	5.8	8.4	360	5.0	4.1	5.9	300
	Action	6.4	5.1	7.7	324	4.6	3.6	5.6	276
	Maintenance	16.2	13.9	18.4	820	9.5	7.2	11.8	570
	Total	100.0			5,078	100.0			6,011
WICOMICO	Precontemplation	49.2	45.7	52.7	1,716	64.3	61.7	66.9	2,450
	Contemplation	22.7	19.7	25.6	791	21.8	21.2	22.4	831
	Preparation	6.1	4.6	7.5	211	4.5	2.9	6.0	171
	Action	6.7	5.0	8.3	233	3.9	2.9	4.8	148
	Maintenance	15.4	12.5	18.4	539	5.5	5.0	6.1	211
	Total	100.0			3,490	100.0			3,811
WORCESTER	Precontemplation	51.8	48.0	55.6	991	62.3	58.0	66.6	1,383
	Contemplation	23.3	20.8	25.7	445	20.8	18.6	23.1	463
	Preparation	6.3	4.6	7.9	120	5.4	5.0	5.8	119
	Action	4.0	2.7	5.4	77	4.3	2.9	5.7	95

Jurisdiction	Smoking Initiation Category	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
	Maintenance	14.7	12.0	17.3	281	7.2	6.0	8.4	160
	Total	100.0			1,914	100.0			2,220
MARYLAND STATE	Precontemplation	54.1	53.0	55.1	114,287	64.9	64.0	65.8	157,980
	Contemplation	25.5	24.7	26.3	53,894	22.4	21.8	23.0	54,492
	Preparation	6.1	5.6	6.5	12,814	4.3	4.1	4.6	10,586
	Action	4.4	4.0	4.7	9,279	3.1	2.9	3.3	7,610
	Maintenance	10.0	9.4	10.6	21,150	5.2	4.8	5.6	12,733
	Total	100.0			211,424	100.0			243,401

Source: 2000 and 2006 Maryland YTS
These data represent underage youth only

Table B-29. Maryland Middle School Youth Who Definitely Think Second Hand Smoke is Harmful by Jurisdiction: 2000 and 2006

Jurisdiction	2000				2006			
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
Allegany County	64.9	60.3	69.6	1,212	73.6	69.8	77.3	1,408
Anne Arundel County	65.5	61.9	69.2	9,261	74.1	69.5	78.6	11,861
Baltimore City	55.7	50.3	61.1	7,885	60.7	52.2	69.3	9,090
Baltimore County	65.3	59.5	71.2	12,284	72.3	67.0	77.6	13,218
Calvert County	60.8	56.9	64.7	1,892	77.5	74.4	80.6	2,812
Caroline County	64.9	59.2	70.6	691	73.2	64.6	81.7	851
Carroll County	74.5	70.6	78.5	4,487	78.2	75.5	80.8	4,812
Cecil County	62.8	58.3	67.3	1,992	72.5	68.9	76.1	2,694
Charles County	66.3	61.6	71.0	2,723	72.6	67.5	77.7	3,989
Dorchester County	66.3	62.4	70.2	695	65.0	59.2	70.8	589
Frederick County	65.4	61.4	69.3	4,988	73.3	68.2	78.4	6,171
Garrett County	62.6	57.3	67.9	650	73.1	70.6	75.6	830
Harford County	67.8	63.7	71.8	4,681	74.5	70.4	78.5	5,652
Howard County	67.2	64.0	70.4	6,544	77.6	73.6	81.7	8,630
Kent County	62.2	56.8	67.6	372	68.1	64.9	71.2	311
Montgomery County	60.7	56.7	64.8	15,943	70.9	67.5	74.4	19,473
Prince George's County	59.3	54.5	64.0	14,356	65.8	61.0	70.7	16,712
Queen Anne's County	61.2	56.6	65.9	940	73.1	69.2	77.0	1,214
Somerset County	59.0	54.2	63.9	343	70.9	66.6	75.2	447
St. Mary's County	61.6	57.7	65.5	1,665	72.5	66.1	78.9	2,347
Talbot County	59.6	55.3	64.0	508	68.7	64.8	72.5	654
Washington County	66.1	61.0	71.2	2,436	67.6	63.8	71.4	2,844
Wicomico County	65.7	62.2	69.3	1,808	71.5	64.5	78.6	1,563
Worcester County	67.4	63.7	71.0	881	71.8	67.9	75.7	988
Maryland	63.1	61.6	64.6	99,235	70.9	69.4	72.5	119,158

Source: 2000 and 2006 Maryland YTS
These data represent underage youth only

Table B-30. Maryland High School Youth Who Definitely Think Second Hand Smoke is Harmful by Jurisdiction: 2000 and 2006

Jurisdiction	2000				2006			
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
Allegany County	68.2	65.2	71.1	2,133	71.5	68.0	75.1	2,149
Anne Arundel County	67.8	65.1	70.6	13,032	70.4	68.4	72.4	15,189
Baltimore City	63.3	60.0	66.6	12,466	68.5	61.4	75.6	12,557
Baltimore County	67.0	62.5	71.4	17,440	67.6	64.6	70.6	20,154
Calvert County	70.6	67.7	73.5	3,021	70.0	68.6	71.4	3,885
Caroline County	64.3	60.9	67.8	961	72.9	69.8	75.9	1,221
Carroll County	69.8	66.9	72.7	5,371	73.2	71.7	74.8	6,940
Cecil County	73.6	70.6	76.6	2,818	70.5	68.1	72.9	3,352
Charles County	63.6	60.4	66.8	3,972	70.2	66.9	73.5	5,909
Dorchester County	67.1	63.5	70.7	921	70.0	69.6	70.3	1,031
Frederick County	68.7	66.3	71.1	6,666	68.8	65.5	72.1	8,389
Garrett County	70.2	66.7	73.6	914	70.5	68.4	72.6	993
Harford County	65.3	62.3	68.3	6,552	72.8	70.9	74.6	8,504
Howard County	70.8	68.4	73.3	8,305	71.1	68.7	73.6	10,149
Kent County	62.4	57.6	67.2	488	62.6	62.6	62.6	467
Montgomery County	64.5	60.9	68.2	21,335	66.7	63.3	70.0	26,863
Prince George's County	69.5	66.6	72.5	20,063	68.6	65.4	71.8	24,750
Queen Anne's County	68.8	66.2	71.5	1,248	70.5	70.3	70.7	1,694
Somerset County	58.5	50.8	66.2	454	65.7	57.9	73.5	466
St. Mary's County	69.3	65.8	72.9	2,743	75.2	73.2	77.2	3,677
Talbot County	63.7	60.4	67.1	745	64.5	59.6	69.4	895
Washington County	70.1	67.5	72.6	3,724	71.9	69.5	74.3	4,492
Wicomico County	69.6	66.4	72.9	2,234	76.5	73.0	79.9	2,965
Worcester County	68.7	64.8	72.6	1,356	71.2	68.0	74.3	1,579
Maryland	67.2	66.2	68.3	138,963	69.4	68.3	70.4	168,271

Source: 2000 and 2006 Maryland YTS
These data represent underage youth only

Table B-31. Changes in Maryland Middle School Students' Attitudes toward Smoking, 2000 and 2006.

	Percent who think young people risk harm if they smoke 1-5 cigarettes per day *			Percent who think tobacco is addictive *			Percent who think it is not safe to smoke 1-2 years then quit *			Percent who think second hand smoke is harmful *			Percent who think that smokers have more friends		
	2000	2006	Relative % Change	2000	2006	Relative % Change	2000	2006	Relative % Change	2000	2006	Relative % Change	2000	2006	Relative % Change
Allegany	68.0	75.7	11.3	69.5	72.3	4.0	66.4	65.1	-2.0	64.9	73.6	13.4	14.3	14.3	0.0
Anne Arundel	69.8	77.2	10.6	69.6	73.3	5.3	63.5	65.5	3.1	65.5	74.1	13.1	19.7	18.0	-8.6
Baltimore City	57.0	58.7	3.0	60.9	60.2	-1.1	65.1	58.5	-10.1	55.7	60.7	9.0	29.8	33.9	13.8
Baltimore Co	71.5	73.5	2.8	69.7	71.5	2.6	68.4	65.3	-4.5	65.3	72.3	10.7	13.6	17.9	31.6
Calvert	71.9	82.1	14.2	71.7	78.2	9.1	67.2	69.9	4.0	60.8	77.5	27.5	21.4	15.7	-26.6
Caroline	65.3	73.0	11.8	66.2	71.6	8.2	64.1	61.6	-3.9	64.9	73.2	12.8	15.5	18.4	18.7
Carroll	76.1	80.7	6.0	74.8	79.8	6.7	74.3	68.0	-8.5	74.5	78.2	5.0	9.4	10.9	16.0
Cecil	67.9	74.2	9.3	67.9	74.0	9.0	64.2	64.0	-0.3	62.8	72.5	15.4	22.2	18.0	-18.9
Charles	71.1	74.3	4.5	67.9	72.0	6.0	65.1	67.9	4.3	66.3	72.6	9.5	20.0	18.1	-9.5
Dorchester	66.9	66.7	-0.3	70.0	65.4	-6.6	64.5	61.4	-4.8	66.3	65.0	-2.0	19.3	22.6	17.1
Frederick	71.7	80.0	11.6	70.7	76.3	7.9	67.6	71.0	5.0	65.4	73.3	12.1	16.5	13.4	-18.8
Garrett	70.9	74.7	5.4	70.4	76.0	8.0	68.0	63.4	-6.8	62.6	73.1	16.8	12.6	16.0	27.0
Harford	70.0	79.0	12.9	69.7	77.8	11.6	62.7	71.3	13.7	67.8	74.5	9.9	20.3	13.6	-33.0
Howard	75.1	80.6	7.3	71.5	78.8	10.2	72.2	71.8	-0.6	67.2	77.6	15.5	11.0	11.9	8.2
Kent	65.0	65.8	1.2	63.5	66.6	4.9	60.8	58.8	-3.3	62.2	68.1	9.5	20.8	18.8	-9.6
Montgomery	70.9	75.0	5.8	64.8	74.1	14.4	67.7	65.3	-3.5	60.7	70.9	16.8	14.7	15.1	2.7
Prince George's	65.0	70.0	7.7	65.0	61.4	-5.5	66.0	62.0	-6.1	59.3	65.8	11.0	27.0	28.2	4.4
Queen Anne's	71.4	79.8	11.8	67.8	77.0	13.6	60.6	69.1	14.0	61.2	73.1	19.4	17.7	14.7	-16.9
Somerset	59.7	71.0	18.9	59.7	72.9	22.1	63.8	63.9	0.2	59.0	70.9	20.2	28.7	26.7	-7.0
St. Mary's	65.1	74.1	13.8	66.8	73.2	9.6	61.7	68.1	10.4	61.6	72.5	17.7	18.2	16.6	-8.8
Talbot	69.6	72.4	4.0	67.0	71.6	6.9	62.3	61.4	-1.4	59.6	68.7	15.3	16.2	17.3	6.8
Washington	67.8	73.7	8.7	67.1	71.0	5.8	68.8	59.9	-12.9	66.1	67.6	2.3	17.9	17.9	0.0
Wicomico	67.2	72.2	7.4	63.8	71.2	11.6	64.0	62.3	-2.7	65.7	71.5	8.8	18.2	23.2	27.5
Worcester	66.1	73.6	11.3	69.1	73.0	5.6	67.9	63.0	-7.2	67.4	71.8	6.5	16.3	18.2	11.7
Maryland	68.5	73.8	7.7	67.2	71.2	6.0	66.7	65.2	-2.2	63.1	70.9	12.4	19.1	19.4	1.6

Source: 2000 and 2006 Maryland YTS

* = Represents students endorsing the strongest positive response option for relevant MYTS questions

These data represent underage youth only

Table B-32. Changes in Maryland High School Students' Attitudes toward Smoking, 2000 and 2006.

	Percent who think young people risk harm if they smoke 1-5 cigarettes per day *			Percent who think tobacco is addictive *			Percent who think it is not safe to smoke 1-2 years then quit *			Percent who think second hand smoke is harmful *			Percent who think that smokers have more friends		
	2000	2006	Relative % Change	2000	2006	Relative % Change	2000	2006	Relative % Change	2000	2006	Relative % Change	2000	2006	Relative % Change
Allegany	63.5	73.1	15.1	69.4	70.8	2.0	49.4	57.7	16.8	68.2	71.5	4.8	20.5	19.0	-7.3
Anne Arundel	66.2	74.5	12.5	67.2	70.8	5.4	52.6	52.7	0.2	67.8	70.4	3.8	22.6	24.2	7.1
Baltimore City	64.8	69.8	7.7	63.5	66.8	5.2	65.3	61.0	-6.6	63.3	68.5	8.2	30.5	31.8	4.3
Baltimore Co	67.5	71.2	5.5	66.2	66.9	1.1	55.7	53.6	-3.8	67.0	67.6	0.9	22.8	27.4	20.2
Calvert	70.3	75.7	7.7	70.0	74.2	6.0	56.1	55.5	-1.1	70.6	70.0	-0.8	20.9	23.1	10.5
Caroline	60.0	69.8	16.3	67.7	71.0	4.9	48.4	50.0	3.3	64.3	72.9	13.4	24.0	24.3	1.3
Carroll	70.6	76.5	8.4	70.7	73.6	4.1	55.9	55.2	-1.3	69.8	73.2	4.9	16.6	19.1	15.1
Cecil	69.6	71.2	2.3	68.3	70.2	2.8	55.8	52.6	-5.7	73.6	70.5	-4.2	21.5	23.4	8.8
Charles	65.1	73.2	12.4	66.8	70.5	5.5	50.3	57.0	13.3	63.6	70.2	10.4	24.9	25.2	1.2
Dorchester	63.3	69.3	9.5	64.1	65.3	1.9	54.5	52.5	-3.7	67.1	70.0	4.3	29.7	25.9	-12.8
Frederick	67.8	73.7	8.7	69.7	71.6	2.7	52.6	53.5	1.7	68.7	68.8	0.1	22.8	22.3	-2.2
Garrett	63.1	72.1	14.3	67.8	73.5	8.4	55.7	52.6	-5.6	70.2	70.5	0.4	18.3	19.4	6.0
Harford	63.8	74.5	16.8	66.6	72.3	8.6	48.8	55.3	13.3	65.3	72.8	11.5	26.3	20.9	-20.5
Howard	74.7	76.9	2.9	72.2	72.5	0.4	57.8	56.1	-2.9	70.8	71.1	0.4	18.9	20.5	8.5
Kent	57.9	60.9	5.2	62.4	61.4	-1.6	46.0	44.9	-2.4	62.4	62.6	0.3	23.9	33.8	41.4
Montgomery	70.7	74.6	5.5	65.6	69.3	5.6	50.4	53.4	6.0	64.5	66.7	3.4	21.4	26.2	22.4
Prince George's	69.4	72.9	5.0	63.0	69.0	9.5	59.1	58.7	-0.7	69.5	68.6	-1.3	30.6	32.2	5.2
Queen Anne's	63.9	72.1	12.8	69.3	70.6	1.9	51.8	54.0	4.2	68.8	70.5	2.5	19.6	21.5	9.7
Somerset	55.4	65.8	18.8	56.7	66.7	17.6	47.6	51.3	7.8	58.5	65.7	12.3	29.9	31.7	6.0
St. Mary's	65.5	77.2	17.9	66.5	75.3	13.2	53.6	58.8	9.7	69.3	75.2	8.5	22.2	17.4	-21.6
Talbot	60.3	66.4	10.1	67.2	65.4	-2.7	46.0	47.8	3.9	63.7	64.5	1.3	20.8	31.7	52.4
Washington	65.0	74.3	14.3	71.8	73.5	2.4	53.8	54.2	0.7	70.1	71.9	2.6	18.4	23.4	27.2
Wicomico	67.1	77.3	15.2	69.3	74.6	7.6	53.9	55.9	3.7	69.6	76.5	9.9	23.0	22.4	-2.6
Worcester	65.7	74.4	13.2	63.5	73.1	15.1	56.8	56.0	-1.4	68.7	71.2	3.6	20.0	20.4	2.0
Maryland	67.8	73.5	8.4	66.5	70.0	5.3	55.1	55.4	0.5	67.2	69.4	3.3	24.0	25.9	7.9

Source: 2000 and 2006 Maryland YTS

* = Represents students endorsing the strongest positive response option for relevant MYTS questions

These data represent underage youth only

Table B-33. Current Cigarette Smoking Prevalence among Maryland Adults by Jurisdiction and Survey Year

Jurisdiction	2000			2002			2006			Relative % Change
	Percent Weighted	95 % CI	Numerator n Weighted	Percent Weighted	95 % CI	Numerator n Weighted	Percent Weighted	95% CI	Numerator n Weighted	
Allegany	22.7	18.5 - 26.9	12,436	19.9	15.6 - 24.1	11,760	19.2	14.7 - 23.8	10,179	-15.4
Anne Arundel	18.7	15.9 - 21.5	66,801	13.8	11.1 - 16.5	50,653	14.6	12.3 - 16.9	53,480	-21.9
Baltimore City	28.3	24.9 - 31.7	132,610	24.5	21.2 - 27.9	120,209	20.8	17.9 - 23.6	93,226	-26.5
Baltimore Co	17.2	14.6 - 19.8	96,777	16.8	14.1 - 19.5	96,404	18.5	15.5 - 21.5	108,246	7.6
Calvert	21.5	17.8 - 25.2	11,215	18.1	14.3 - 21.9	9,508	18.0	13.7 - 22.3	11,615	-16.3
Caroline	24.3	20.6 - 28.0	5,189	18.6	14.5 - 22.7	4,040	18.5	13.5 - 23.5	4,351	-23.9
Carroll	17.7	13.9 - 21.5	19,583	11.4	8.3 - 14.4	12,396	14.9	11.7 - 18.2	18,285	-15.8
Cecil	23.4	19.0 - 27.8	14,055	23.0	18.7 - 27.3	14,280	22.1	18.4 - 25.8	15,936	-5.6
Charles	20.2	16.3 - 24.1	16,969	18.7	14.7 - 22.6	16,037	13.4	10.4 - 16.4	13,373	-33.7
Dorchester	21.3	17.2 - 25.4	4,761	20.3	15.9 - 24.7	4,772	16.4	11.7 - 21.1	3,907	-23.0
Frederick	16.7	13.3 - 20.1	23,047	13.9	10.3 - 17.4	19,548	12.1	9.5 - 14.7	19,048	-27.5
Garrett	19.2	15.3 - 23.1	4,022	16.4	12.4 - 20.3	3,657	17.1	13.2 - 20.9	3,828	-10.9
Harford	18.4	14.6 - 22.2	28,851	14.9	11.4 - 18.4	23,427	18.7	15.8 - 21.6	32,930	1.6%
Howard	10.7	8.4 - 13.0	18,974	9.9	7.3 - 12.5	17,670	9.1	6.8 - 11.4	17,617	-15.0
Kent	17.6	14.0 - 21.2	2,630	16.6	11.5 - 21.7	2,522	15.3	9.8 - 20.9	2,216	-13.1
Montgomery	9.3	7.3 - 11.3	59,748	10.1	7.7 - 12.5	65,897	9.1	7.2 - 11.1	62,598	-2.2
Prince George's	14.8	12.2 - 17.4	86,135	11.9	9.3 - 14.5	69,781	11.7	9.6 - 13.9	70,687	-20.9
Queen Anne's	23.3	19.1 - 27.5	7,065	14.3	10.8 - 17.9	4,334	16.0	11.7 - 20.4	5,503	-31.3
Somerset	20.4	16.7 - 24.1	3,936	18.5	14.2 - 22.7	3,725	22.0	14.4 - 29.5	3,817	7.8
St. Mary's	21.4	17.4 - 25.4	13,328	14.8	11.5 - 18.2	9,166	16.9	12.9 - 20.8	11,443	-21.0
Talbot	14.8	11.3 - 18.3	3,893	18.3	12.5 - 24.1	4,845	15.4	10.6 - 20.2	4,290	4.1
Washington	22.0	17.9 - 26.1	21,120	18.9	14.9 - 22.9	19,049	16.2	13.3 - 19.2	16,241	-26.4
Wicomico	21.5	17.3 - 25.7	12,679	20.0	15.8 - 24.2	12,675	19.4	14.7 - 24.1	12,620	-9.8
Worcester	22.4	18.0 - 26.8	7,539	23.4	18.8 - 27.9	8,636	19.3	14.5 - 24.1	7,486	-13.8
Maryland	17.5	16.6 - 18.4	673,365	15.4	14.5 - 16.3	604,990	14.8	14.0 - 15.6	602,924	-15.4

Source: 2000, 2002, 2006 Maryland ATS

Table B-34. Current Tobacco Use among Maryland Adults by Jurisdiction and Survey Year

Jurisdiction	2000			2002			2006			Relative % Change
	Percent Weighted	95 % CI	Numerator n Weighted	Percent Weighted	95 % CI	Numerator n Weighted	Percent Weighted	95% CI	Numerator n Weighted	
Allegany	26.9	22.6 - 31.2	14,791	24.1	19.6 - 28.6	14,336	23.3	18.5 - 28.0	12,321	-13.4
Anne Arundel	23.1	20.1 - 26.1	82,594	19.6	16.6 - 22.6	71,786	19.5	17.0 - 22.1	71,579	-15.6
Baltimore City	31.4	28.0 - 34.8	147,567	27.7	24.2 - 31.2	135,812	23.5	20.5 - 26.4	105,390	-25.2
Baltimore Co	22	19.2 - 24.8	123,439	22.3	19.3 - 25.2	128,299	21.6	18.4 - 24.7	126,298	-1.8
Calvert	27.1	23.1 - 31.1	14,135	26.5	22.0 - 31.0	13,918	22.2	17.7 - 26.7	14,342	-18.1
Caroline	28.3	24.5 - 32.1	6,097	23.2	18.7 - 27.8	5,064	20.9	15.8 - 26.1	4,935	-26.1
Carroll	25.2	21.0 - 29.4	27,878	19.1	15.1 - 23.1	20,807	20.7	17.1 - 24.4	25,381	-17.9
Cecil	27.4	22.8 - 32.0	16,475	29.3	24.6 - 34.0	18,215	25.8	22.0 - 29.6	18,607	-5.8
Charles	25.7	21.4 - 30.0	21,636	23.7	19.4 - 28.0	20,349	17.9	14.6 - 21.2	17,905	-30.4
Dorchester	24.1	19.9 - 28.3	5,433	23.9	19.2 - 28.5	5,612	18.8	13.9 - 23.7	4,482	-22.0
Frederick	23.1	19.2 - 27.0	32,021	19.2	15.3 - 23.2	27,188	19.1	16.0 - 22.2	30,019	-17.3
Garrett	24.9	20.7 - 29.1	5,291	22.7	18.3 - 27.0	5,065	23.2	18.9 - 27.5	5,204	-6.8
Harford	23.4	19.2 - 27.6	36,857	21.0	17.0 - 25.0	33,097	23.0	19.9 - 26.1	40,541	-1.7
Howard	15.8	13.2 - 18.4	28,181	15.4	12.4 - 18.4	27,403	13.5	10.9 - 16.1	26,152	-14.6
Kent	21.7	17.8 - 25.6	3,251	21.1	15.8 - 26.4	3,211	18.9	13.1 - 24.7	2,731	-12.9
Montgomery	14.3	11.9 - 16.7	92,525	14.2	11.4 - 16.9	92,273	12.1	9.9 - 14.2	82,624	-15.4
Prince George's	17.2	14.5 - 19.9	99,878	13.7	11.0 - 16.4	80,497	14.7	12.3 - 17.1	88,485	-14.5
Queen Anne's	26.4	22.1 - 30.7	8,011	17.7	13.9 - 21.5	5,354	21.5	16.6 - 26.4	7,387	-18.6
Somerset	25.8	21.6 - 30.0	4,978	20.5	16.1 - 24.9	4,134	26.7	18.8 - 34.6	4,626	3.5
St. Mary's	28.1	23.7 - 32.5	17,496	19.1	15.4 - 22.8	11,865	20.5	16.4 - 24.6	13,914	-27.0
Talbot	18.2	14.3 - 22.1	4,788	24.4	17.8 - 31.0	6,467	20.9	15.5 - 26.4	5,846	14.8
Washington	26.4	22.0 - 30.8	25,768	24.5	20.1 - 28.9	24,715	19.4	16.3 - 22.6	19,446	-26.5
Wicomico	24.7	20.3 - 29.1	14,578	22.6	18.3 - 26.8	14,369	24.2	19.0 - 29.4	15,749	-2.0
Worcester	26.1	21.6 - 30.6	8,825	27.9	23.2 - 32.7	10,329	22.6	17.5 - 27.6	8,736	-13.4
Maryland	21.8	20.9 - 22.7	842,495	19.8	18.8 - 20.8	780,164	18.5	17.7 - 19.4	752,700	-15.1

Source: 2000, 2002, 2006 Maryland ATS

Table B-35. Success Rate of Maryland Adults who tried to Quit Smoking in the Past 12 Months by Jurisdiction, 2000 and 2006

Jurisdiction	2002				2006			
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted
Allegany County	23.8	9.9	37.8	1,029	37.8	14.0	61.6	2,065
Anne Arundel County	28.7	18.1	39.3	8,979	28.9	17.4	40.5	7,071
Baltimore City	15.5	8.7	22.4	8,539	25.8	16.8	34.8	13,286
Baltimore County	33.6	23.0	44.1	17,999	36.1	22.4	49.8	16,443
Calvert County	21.3	10.1	32.4	1,154	20.6	6.7	34.6	1,209
Caroline County	26.4	13.2	39.5	465	34.5	12.6	56.5	513
Carroll County	24.6	10.1	39.1	2,092	29.6	11.2	48.0	2,438
Cecil County	13.4	2.7	24.1	927	23.6	13.2	33.9	1,576
Charles County	10.8	0.7	20.8	857	38.8	23.8	53.9	2,854
Dorchester County	25.2	12.1	38.4	578	47.8	25.8	69.9	983
Frederick County	19.2	6.6	31.9	2,326	25.7	11.4	40.1	1,908
Garrett County	16.7	4.2	29.3	292	30.6	9.0	52.1	375
Harford County	25.1	8.7	41.4	2,719	25.2	14.9	35.5	3,649
Howard County	30.1	16.6	43.6	2,565	30.6	15.3	45.9	2,042
Kent County	39.3	22.4	56.3	484	38.9	11.8	66.0	531
Montgomery County	23.9	10.6	37.3	7,299	35.2	18.8	51.7	10,928
Prince George's County	22.1	11.1	33.1	10,449	34.0	20.2	47.8	10,646
Queen Anne's County	17.2	6.7	27.8	554	49.4	20.6	78.3	1,730
Somerset County	35.9	21.7	50.2	617	33.2	3.0	63.4	586
St. Mary's County	21.6	9.6	33.5	1,205	54.3	37.1	71.5	2,945
Talbot County	27.0	12.2	41.7	538	45.4	22.1	68.7	1,086
Washington County	3.9	0.0	9.9	192	29.7	16.0	43.3	1,980
Wicomico County	24.2	10.6	37.8	1,408	7.7	0.0	15.7	241
Worcester County	13.7	2.6	24.9	339	36.4	15.8	57.0	1,158
Maryland	23.4	20.0	26.8	73,606	31.7	27.6	35.8	88,244

Source: 2000 and 2006 Maryland ATS

Table B-36. Change in Percent of Maryland Households with Home Rules about Smoking (no smoking in home)

Jurisdiction	2000			2002			2006			Relative % Change
	Percent Weighted	95 % CI	Numerator n Weighted	Percent Weighted	95 % CI	Numerator n Weighted	Percent Weighted	95% CI	Numerator n Weighted	
Allegany	59.0	54.5 - 63.5	32,387	61.0	55.8 - 66.3	36,323	70.7	66.0 - 75.5	37,557	19.8
Anne Arundel	67.8	64.5 - 71.1	242,705	71.4	68.1 - 74.6	261,167	80.5	78.1 - 82.8	295,773	18.7
Baltimore City	51.5	47.9 - 55.1	241,902	56.1	52.4 - 59.8	274,752	67.8	64.6 - 70.9	304,843	31.7
Baltimore Co	61.2	57.9 - 64.6	343,983	68.1	64.8 - 71.3	391,921	70.1	66.7 - 73.5	410,955	14.5
Calvert	60.2	55.9 - 64.5	31,432	72.9	68.5 - 77.2	38,265	79.6	75.8 - 83.5	51,623	32.2
Caroline	55.2	51.1 - 59.3	11,891	67.0	61.8 - 72.3	14,613	77.0	72.1 - 81.9	18,140	39.5
Carroll	67.9	63.5 - 72.4	75,269	75.4	71.2 - 79.5	82,191	81.8	78.4 - 85.2	100,080	20.5
Cecil	57.7	52.7 - 62.7	34,730	66.1	61.3 - 70.8	41,068	78.3	75.0 - 81.5	56,490	35.7
Charles	61.8	57.0 - 66.5	51,986	68.1	63.4 - 72.7	58,466	80.3	77.1 - 83.5	80,266	29.9
Dorchester	53.8	49.0 - 58.6	12,125	59.6	54.1 - 65.1	14,015	75.0	69.7 - 80.3	17,960	39.4
Frederick	71.8	67.5 - 76.0	99,355	76.5	72.3 - 80.6	108,097	82.5	79.6 - 85.4	130,095	14.9
Garrett	59.5	54.9 - 64.1	12,641	66.2	61.4 - 71.0	14,804	70.6	66.0 - 75.2	15,847	18.7
Harford	68.3	63.8 - 72.7	107,374	72.0	67.5 - 76.5	113,511	77.2	74.4 - 80.0	135,919	13.0
Howard	74.4	71.3 - 77.4	132,715	80.3	77.4 - 83.1	143,138	85.6	83.3 - 87.9	166,451	15.1
Kent	57.6	53.0 - 62.1	8,621	64.1	58.9 - 69.3	9,750	74.4	68.8 - 80.1	10,844	29.2
Montgomery	74.4	71.4 - 77.5	480,004	77.6	74.5 - 80.7	505,520	83.4	81.1 - 85.7	571,855	12.1
Prince George's	66.1	62.7 - 69.5	385,023	72.4	69.0 - 75.9	424,994	80.6	78.1 - 83.2	485,716	21.9
Queen Anne's	58.3	53.6 - 63.0	17,705	70.3	65.8 - 74.7	21,261	78.8	74.4 - 83.2	27,092	35.2
Somerset	52.8	48.0 - 57.6	10,190	57.2	51.0 - 63.5	11,541	75.3	69.2 - 81.4	13,083	42.6
St. Mary's	64.1	59.5 - 68.6	39,840	71.3	67.0 - 75.6	44,319	82.1	78.8 - 85.4	55,720	28.1
Talbot	65.1	60.4 - 69.9	17,133	62.6	56.8 - 68.4	16,581	79.8	75.2 - 84.4	22,378	22.6
Washington	64.2	59.5 - 68.9	62,688	71.0	66.6 - 75.4	71,704	79.2	76.2 - 82.2	79,332	23.4
Wicomico	60.2	55.3 - 65.0	35,529	66.0	61.2 - 70.7	41,999	76.1	71.5 - 80.6	49,542	26.4
Worcester	60.7	55.8 - 65.5	20,509	63.5	58.6 - 68.4	23,494	73.0	67.9 - 78.2	28,297	20.3
Maryland	64.9	63.8 - 66.0	2,507,736	70.1	69.0 - 71.2	2,763,493	77.8	76.9 - 78.7	3,165,858	19.9

Source: 2000, 2002, 2006 Maryland ATS

Table B-37. Maryland Adults Who Strongly Agree that Second Hand Smoke is Harmful to Children by Jurisdiction: 2000 and 2006

Jurisdiction	2000				2006				Relative % Change
	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	Percent Weighted	95 % CI Lower	95 % CI Upper	Numerator n Weighted	
Allegany County	74.6	70.6	78.7	40,996	76.6	72.2	80.9	40654	2.7
Anne Arundel County	77.3	74.4	80.2	276,608	77.5	75.0	80.0	285011	0.3
Baltimore City	77.5	74.6	80.4	363,857	82.8	80.5	85.2	372683	6.8
Baltimore County	74.6	71.6	77.6	419,070	77.0	73.9	80.1	451248	3.2
Calvert County	72.9	69.0	76.8	38,073	78.1	73.8	82.4	50621	7.1
Caroline County	73.5	69.8	77.1	15,819	81.3	76.8	85.8	19156	10.6
Carroll County	74.2	69.9	78.5	82,223	79.1	75.7	82.6	96810	6.6
Cecil County	74.9	70.5	79.3	45,073	79.6	76.4	82.7	57415	6.3
Charles County	71.7	67.3	76.1	60,365	81.7	78.8	84.6	81623	13.9
Dorchester County	77.6	73.6	81.5	17,469	76.7	71.1	82.3	18357	-1.2
Frederick County	74.1	69.8	78.4	102,609	77.0	73.7	80.2	121323	3.9
Garrett County	75.3	71.2	79.4	16,005	79.0	74.7	83.3	17736	4.9
Harford County	76.2	72.1	80.3	119,796	77.3	74.4	80.2	136094	1.4
Howard County	78.0	75.2	80.9	139,257	84.3	82.0	86.6	163890	8.1
Kent County	73.7	69.8	77.7	11,046	80.0	75.7	84.3	11653	8.5
Montgomery County	77.4	74.4	80.3	499,203	83.3	80.9	85.7	571328	7.6
Prince George's County	77.3	74.3	80.4	450,,413	84.6	82.4	86.8	509579	9.4
Queen Anne's County	73.3	69.0	77.6	22,240	78.2	72.4	84.0	26884	6.7
Somerset County	73.9	69.6	78.2	14,266	80.3	74.0	86.6	13949	8.7
St. Mary's County	75.0	71.0	79.0	46,660	74.8	70.3	79.3	50779	-0.3
Talbot County	77.6	73.6	81.6	20,404	78.7	73.5	84.0	22079	1.4
Washington County	76.4	72.1	80.7	74,594	82.2	79.5	84.9	82332	7.6
Wicomico County	75.8	71.5	80.1	44,757	79.3	74.8	83.9	51679	4.6
Worcester County	75.9	71.7	80.1	25,647	78.8	73.9	83.7	30534	3.8
Maryland	76.3	75.3	77.3	2,946,451	80.7	79.9	81.5	3,283,421	5.8

Source: 2000 and 2006 Maryland ATS

Table B-38. Number of Minority-Based Community Organizations Funded by Minority Group, Jurisdiction, and Fiscal Year

Jurisdiction	FY2002				FY2003				FY2004				FY2005				FY2006			
	AA	H/L	Asian	NA	AA	H/L	Asian	NA	AA	H/L	Asian	NA	AA	H/L	Asian	NA	AA	H/L	Asian	NA
Allegany	0	0	0	0	4	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
Anne Arundel	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	1	0
Baltimore City	4	0	1	0	0	0	0	0	19	2	6	3	26	5	5	4	3	0	2	2
Baltimore Co	1	0	1	0	12	0	1	0	0	3	0	4	3	2	2	0	2	1	1	0
Calvert	1	0	0	0	2	0	1	0	6	0	0	0	1	0	0	0	4	0	0	0
Caroline	0	0	0	0	1	0	0	0	1	0	7	0	2	2	2	0	1	0	0	0
Carroll	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	0	3	0	0	0
Cecil	0	0	0	0	7	0	0	0	0	0	0	0	4	0	0	0	6	0	0	0
Charles	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
Dorchester	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
Frederick	0	0	0	0	1	2	3	0	3	0	0	0	0	0	0	0	0	2	0	0
Garrett	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harford	1	0	1	0	0	0	0	0	2	0	0	0	1	0	0	0	2	0	0	1
Howard	0	0	2	0	2	0	1	0	4	0	2	0	0	0	0	0	1	1	1	0
Kent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Montgomery	1	0	1	0	1	1	1	0	0	3	6	0	0	11	11	0	1	0	0	0
Prince George's	2	2	1	0	8	2	2	0	2	2	0	0	1	1	1	0	2	15	0	0
Queen Anne's	2	0	0	0	0	0	0	0	7	18	0	0		0	0	0	0	0	0	0
St. Mary's	4	1	0	0	0	0	0	0	16	2	1	0	9	2	2	0	1	0	0	0
Somerset	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Talbot	0	0	0	0	6	0	3	0	0	0	0	0	1	0	0	0	2	1	0	0
Washington	1	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Wicomico	0	0	0	0	2	1	0	0	0	0	0	0	2	0	0	0	1	0	0	0
Worcester	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0
Maryland	18	3	7	0	51	6	12	1	75	30	22	7	58	28	28	4	39	20	6	3

Source: DHMH Tobacco Program Activities Database

Table B-39. Number of Minority-Based Churches Funded by Minority Group, Jurisdiction, and Fiscal Year

Jurisdiction	FY2002				FY2003				FY2004				FY2005				FY2006			
	AA	H/L	Asian	NA	AA	H/L	Asian	NA	AA	H/L	Asian	NA	AA	H/L	Asian	NA	AA	H/L	Asian	NA
Allegany	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Anne Arundel	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Baltimore City	1	0	0	0	0	0	0	0	15	1	0	0	20	2	0	0	3	2	0	0
Baltimore Co	0	0	0	0	2	1	0	0	0	0	0	2	4	1	0	2	2	0	0	0
Calvert	0	0	0	0	0	0	0	0	4	0	0	0	2		0	0	8	0	0	0
Caroline	0	0	0	0	0	0	0	0	5	2	0	0	4	2	0	0	5	0	0	0
Carroll	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Cecil	3	0	0	0	7	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
Charles	0	0	0	0	2	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0
Dorchester	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0
Frederick	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0
Garrett	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harford	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
Howard	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0
Kent	0	0	0	0	1	0	0	0	9	0	0	0	21	0	0	0	5	0	0	0
Montgomery	0	0	0	0	7	0	0	0	15	0	0	0	11	0	0	0	0	0	0	0
Prince George's	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queen Anne's	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
St. Mary's	2	0	0	0	0	0	0	0	6	1	1	0	0	0	0	0	0	0	0	0
Somerset	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Talbot	2	0	0	0	6	0	0	0	8	0	0	0	14	0	1	0	6	3	0	0
Washington	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wicomico	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worcester	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maryland	15	0	0	0	28	2	0	0	94	4	3	2	85	6	1	2	34	5	2	0

Source: DHMH Tobacco Program Activities Database

Table B-40. Number of Minority Outreach Activities by Minority Group, MOTA Collaboration, Jurisdiction, and Fiscal Year

Jurisdiction	FY2003					FY2004					FY2005					FY2006				
	AA	H/L	Asian	NA	MOTA	AA	H/L	Asian	NA	MOTA	AA	H/L	Asian	NA	MOTA	AA	H/L	Asian	NA	MOTA
Allegany	0	0	0	0	1	8	0	0	0	0	2	0	0	0	0	3	0	0	0	0
Anne Arundel	0	0	0	0	0	0	0	0	0	0	3	5	1	0	0	33	3	2	0	0
Baltimore City	0	0	0	0	0	233	7	57	7	10	320	28	66	22	18	172	16	3	10	5
Baltimore Co	10	2	0	0	0	37	14	0	0	0	18	9	8	0	11	13	4	3	0	4
Calvert	0	0	0	0	1	10	0	0	0	0	13	1	0	0	0	8	4	0	0	0
Caroline	5	1	0	0	2	11	2	0	0	7	24	1	0	0	18	9	1	0	0	12
Carroll	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Cecil	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Charles	0	0	0	0	0	30	20	20	0	8	12	0	0	0	4	6	0	0	0	1
Dorchester	14	0	0	0	1	25	0	0	0	4	0	0	0	0	3	0	0	0	0	3
Frederick	1	2	0	0	0	4	3	1	0	1	1	3	3	0	11	1	2	2	0	7
Garrett	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Harford	0	0	0	0	0	5	3	2	2	3	5	1	1	1	5	3	0	0	1	5
Howard	2	1	0	0	0	0	0	0	0	1	1	2	7	0	0	1	0	0	0	0
Kent	3	0	0	0	2	1	0	0	0	3	2	0	0	0	2	7	0	0	0	7
Montgomery	2	1	1	0	0	17	0	4	0	0	13	2	0	0	1	52	0	4	0	0
Prince George's	7	8	5	0	3	8	25	2	0	12	0	0	0	0	0	11	23	12	0	0
Queen Anne's	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	6	0	0	0	0
St. Mary's	0	0	0	0	0	0	0	0	0	0	22	2	0	0	2	5	2	0	0	0
Somerset	0	0	0	0	0	0	1	0	0	60	0	0	0	1	0	12	0	0	0	0
Talbot	3	0	1	0	6	3	6	0	0	2	0	3	0	0	5	2	4	0	0	11
Washington	4	1	1	0	0	4	2	0	0	4	2	1	0	0	0	3	2	0	0	2
Wicomico	2	0	0	1	1	0	0	0	0	0	0	0	0	0	2	3	0	0	0	3
Worcester	0	0	0	0	0	1	0	0	0	16	0	1	0	0	0	0	0	0	0	5
Maryland	54	17	8	1	22	398	83	86	9	131	441	59	86	24	82	350	61	26	11	65

Source: DHMH Tobacco Program Activities Database

Note: No data was reported for FY2001 and FY2002

Table B-41. Percent of Group Cessation Participants who are Racial/Ethnic Minorities by Minority Group, Jurisdiction, and Fiscal Year

Jurisdiction	FY2003				FY2004				FY2005				FY2006			
	AA	NA	H/L	Asian	AA	NA	H/L	Asian	AA	NA	H/L	Asian	AA	NA	H/L	Asian
Allegany	0.7%	0.0%	0.0%	0.0%	6.8%	0.0%	0.0%	0.0%	13.2%	0.6%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%
Anne Arundel	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.3%	0.3%	0.3%	0.0%	14.5%	0.0%	0.0%	1.3%
Baltimore City	26.7%	3.0%	3.1%	1.4%	31.1%	4.8%	5.6%	6.3%	24.1%	2.6%	3.2%	1.8%	36.1%	3.6%	5.3%	1.5%
Baltimore	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.3%	0.0%	32.1%	1.3%	5.8%	1.8%	32.7%	1.0%	0.7%	0.7%
Calvert	31.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%
Caroline	0.5%	0.2%	0.0%	0.0%	9.8%	0.0%	0.7%	0.0%	12.1%	0.0%	0.0%	0.0%	8.1%	0.0%	1.4%	0.0%
Carroll	0.0%	0.0%	0.0%	0.0%	1.1%	1.1%	3.4%	0.0%	6.1%	0.0%	1.7%	0.0%	0.8%	0.0%	0.0%	0.0%
Cecil	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Charles	28.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.8%	0.0%	0.0%	0.0%	21.3%	0.0%	0.0%	0.0%
Dorchester	59.7%	0.0%	0.0%	0.0%	12.3%	0.0%	0.0%	0.0%	51.0%	0.0%	0.0%	0.0%	27.6%	0.0%	0.0%	0.0%
Frederick	0.8%	0.0%	0.0%	5.6%	15.7%	0.0%	1.6%	0.0%	3.4%	0.4%	5.3%	1.9%	7.5%	0.0%	0.0%	0.0%
Garrett	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Harford	3.0%	0.0%	3.0%	6.0%	6.0%	0.0%	0.7%	0.0%	20.4%	0.0%	2.0%	0.0%	8.1%	0.0%	2.0%	0.0%
Howard	9.5%	0.0%	1.1%	0.0%	21.2%	0.5%	1.6%	2.1%	13.8%	0.0%	0.0%	1.6%	23.2%	0.0%	0.0%	3.2%
Kent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Montgomery	87.1%	2.5%	23.3%	15.4%	20.5%	0.7%	7.2%	2.0%	31.8%	0.9%	8.1%	6.0%	32.0%	1.2%	13.1%	6.3%
Prince George's	60.9%	0.0%	0.9%	0.0%	67.3%	0.0%	0.3%	0.0%	57.5%	0.4%	1.8%	9.7%	75.3%	0.0%	0.8%	3.9%
Queen Anne's	4.7%	0.0%	0.0%	0.0%	10.9%	2.2%	2.2%	0.0%	6.5%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	14.3%
Somerset	0.0%	50.0%	0.0%	0.0%	90.9%	0.0%	0.0%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
St. Mary's	9.9%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.4%	16.0%	0.0%	0.5%	0.0%	8.0%	0.5%	1.6%	0.0%
Talbot	64.3%	0.0%	92.9%	0.0%	19.5%	0.0%	0.9%	0.0%	13.8%	0.0%	0.6%	0.0%	15.7%	0.8%	0.8%	0.0%
Washington	8.2%	0.0%	1.6%	0.0%	15.5%	0.0%	3.4%	0.0%	7.1%	3.6%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%
Wicomico	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%
Worcester	0.0%	0.0%	0.0%	0.0%	9.6%	0.0%	0.0%	0.0%	18.6%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%
Maryland	14.4%	0.9%	2.3%	1.2%	21.5%	1.9%	3.9%	2.8%	25.7%	1.5%	3.8%	2.9%	31.0%	2.1%	4.4%	1.8%

Source: DHMH Tobacco Program Activities Database

Note: Race/Ethnicity data was not reported in FY2001 and FY2002

AA = African American; NA = Native American; H/L = Hispanic/Latino; Asian = Asian

Table B-42. Percent of Group Cessation Participants who are Pregnant Women by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Allegany County	—	—	2.9%	1.7%	4.8%	0.0%	3.2%
Anne Arundel County	—	—	0.0%	0.0%	0.0%	0.0%	0.0%
Baltimore City	—	—	0.0%	0.0%	14.5%	18.8%	9.9%
Baltimore County	—	—	0.0%	14.0%	2.2%	1.0%	3.0%
Calvert County	—	—	58.5%	0.0%	0.0%	4.4%	15.2%
Caroline County	—	—	6.2%	13.3%	6.5%	20.3%	8.4%
Carroll County	—	—	0.0%	1.1%	0.0%	0.8%	0.4%
Cecil County	—	—	0.0%	0.0%	0.0%	0.0%	0.0%
Charles County	—	—	5.9%	0.0%	36.5%	0.0%	6.2%
Dorchester County	—	—	1.6%	0.5%	0.0%	0.0%	0.3%
Frederick County	—	—	12.7%	8.2%	3.4%	8.8%	7.2%
Garrett County	—	—	1.2%	1.4%	0.0%	0.0%	0.5%
Harford County	—	—	0.0%	0.7%	4.1%	3.0%	1.3%
Howard County	—	—	38.9%	1.1%	0.0%	0.8%	5.5%
Kent County	—	—	0.0%	0.0%	0.0%	96.3%	22.6%
Montgomery County	—	—	0.4%	0.1%	0.0%	1.2%	0.2%
Prince George's County	—	—	0.9%	1.6%	1.1%	1.5%	1.0%
Queen Anne's County	—	—	0.0%	2.2%	0.0%	0.0%	0.7%
Somerset County	—	—	50.0%	0.0%	0.0%	0.0%	3.9%
St. Mary's County	—	—	0.0%	0.4%	7.5%	1.6%	2.1%
Talbot County	—	—	0.0%	0.9%	0.0%	0.0%	0.2%
Washington County	—	—	0.0%	0.0%	0.0%	0.0%	0.0%
Wicomico County	—	—	0.0%	0.0%	0.0%	0.0%	0.0%
Worcester County	—	—	0.0%	0.0%	4.7%	20.3%	4.8%
Maryland	—	—	2.4%	2.2%	7.6%	11.6%	5.2%

— = Data was not reported in FY2001 and FY2002
Source: DHMH Tobacco Program Activities Database

Table B-43. Number of Tobacco Coalition Members That Indicated Race by Jurisdiction and Fiscal Year

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006
Allegany County	38	54	66	48	46
Anne Arundel County	7	8	17	21	19
Baltimore City	480	349	136	89	111
Baltimore County	52	30	35	66	60
Calvert County	21	33	45	45	35
Caroline County	19	19	24	23	28
Carroll County	28	45	22	37	35
Cecil County	8	9	22	32	14
Charles County	51	57	63	68	66
Dorchester County	34	31	28	30	38
Frederick County	31	36	42	30	30
Garrett County	20	23	15	13	0
Harford County	41	54	56	57	53
Howard County	18	26	21	18	26
Kent County	14	29	44	45	28
Montgomery County	45	42	52	42	20
Prince George's County	76	76	60	78	44
Queen Anne's County	40	38	35	35	—
St. Mary's County	18	20	27	18	27
Somerset County	23	29	28	26	0
Talbot County	33	36	30	30	29
Washington County	41	56	49	38	34
Wicomico County	29	36	42	31	32
Worcester County	30	32	—	35	—
Maryland	1,197	1168	959	1,233	775

Source: Annual Local Tobacco Grant Applications

Table B-44. Percentage of African-American Tobacco Coalition Members by Jurisdiction and Fiscal Year, and 2000 U.S. Census

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	2.6%	13.0%	24.2%	14.6%	10.9%	5.3%
Anne Arundel County	14.3%	12.5%	5.9%	14.3%	21.1%	13.6%
Baltimore City	54.6%	48.4%	63.2%	45.0%	45.0%	64.3%
Baltimore County	13.5%	20.0%	22.9%	25.8%	21.7%	23.2%
Calvert County	47.6%	33.3%	31.1%	31.1%	34.3%	12.5%
Caroline County	21.1%	15.8%	25.0%	34.8%	32.1%	14.8%
Carroll County	7.1%	28.9%	36.4%	35.1%	37.1%	2.3%
Cecil County	12.5%	11.1%	4.5%	6.3%	21.4%	3.9%
Charles County	25.5%	24.6%	31.7%	35.3%	34.8%	26.1%
Dorchester County	17.6%	25.8%	32.1%	33.3%	52.6%	28.4%
Frederick County	9.7%	8.3%	9.5%	10.0%	6.7%	6.4%
Garrett County	0.0%	0.0%	0.0%	0.0%	—	0.4%
Harford County	12.2%	22.2%	21.4%	19.3%	18.9%	9.3%
Howard County	27.8%	26.9%	28.6%	27.8%	19.2%	15.8%
Kent County	35.7%	48.3%	38.6%	40.0%	57.1%	17.4%
Montgomery County	17.8%	19.0%	25.0%	28.6%	30.0%	14.9%
Prince George's County	44.7%	46.1%	60.0%	65.4%	56.8%	65.7%
Queen Anne's County	27.5%	36.8%	40.0%	42.9%	—	8.8%
St. Mary's County	8.7%	6.9%	14.3%	15.4%	14.8%	13.9%
Somerset County	33.3%	40.0%	44.4%	50.0%	—	41.1%
Talbot County	15.2%	8.3%	20.0%	20.0%	17.2%	15.4%
Washington County	12.2%	12.5%	18.4%	23.7%	20.6%	7.8%
Wicomico County	13.8%	27.8%	21.4%	22.6%	21.9%	23.3%
Worcester County	23.3%	28.1%	—	28.6%	—	16.7%
Maryland	34.0%	31.3%	32.4%	36.2%	30.8%	27.9%

Sources: Annual Local Tobacco Grant Applications and 2000 Census

Table B-45. Percentage of Hispanic/Latino Tobacco Coalition Members by Jurisdiction and Fiscal Year, and 2000 U.S. Census

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	5.3%	3.7%	4.5%	4.2%	2.2%	0.8%
Anne Arundel County	0.0%	0.0%	0.0%	4.5%	5.3%	2.6%
Baltimore City	1.7%	8.9%	8.1%	4.6%	4.5%	1.7%
Baltimore County	5.8%	3.2%	5.7%	7.4%	10.0%	2.3%
Calvert County	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%
Caroline County	0.0%	0.0%	4.2%	0.0%	0.0%	2.7%
Carroll County	3.6%	4.3%	0.0%	2.7%	2.9%	1.0%
Cecil County	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Charles County	2.0%	5.2%	1.6%	2.9%	1.5%	2.3%
Dorchester County	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
Frederick County	3.2%	2.8%	4.9%	0.0%	3.3%	2.4%
Garrett County	0.0%	0.0%	0.0%	0.0%	—	0.4%
Harford County	4.9%	8.9%	8.9%	8.6%	7.5%	1.9%
Howard County	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%
Kent County	0.0%	0.0%	2.3%	2.2%	0.0%	2.8%
Montgomery County	13.3%	14.0%	11.5%	13.6%	25.0%	13.3%
Prince George's County	2.6%	8.9%	5.0%	6.2%	11.4%	9.9%
Queen Anne's County	0.0%	0.0%	0.0%	0.0%	—	1.1%
St. Mary's County	0.0%	6.7%	3.6%	7.4%	7.4%	2.0%
Somerset County	5.6%	5.0%	3.7%	5.6%	—	1.3%
Talbot County	3.0%	2.6%	3.3%	3.3%	3.4%	1.8%
Washington County	2.4%	1.8%	2.0%	4.9%	8.8%	1.2%
Wicomico County	3.4%	7.9%	4.8%	3.1%	3.1%	2.2%
Worcester County	0.0%	0.0%	—	0.0%	—	1.3%
Maryland	2.5%	5.6%	4.3%	4.2%	4.8%	4.3%

Sources: Annual Local Tobacco Grant Applications and 2000 Census

Table B-46. Percentage of Asian American Tobacco Coalition Members by Jurisdiction and Fiscal Year, and 2000 Census

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Anne Arundel County	0.0%	0.0%	5.9%	4.8%	0.0%	2.3%
Baltimore City	2.3%	4.0%	8.1%	4.1%	5.1%	1.5%
Baltimore County	1.9%	3.3%	2.9%	3.0%	8.3%	3.9%
Calvert County	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Caroline County	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Carroll County	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Cecil County	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
Charles County	7.8%	7.0%	9.5%	5.9%	4.6%	1.8%
Dorchester County	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
Frederick County	0.0%	0.0%	2.4%	3.3%	0.0%	1.7%
Garrett County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Harford County	0.0%	5.6%	5.4%	5.3%	5.7%	1.5%
Howard County	5.6%	11.5%	4.8%	11.1%	19.2%	10.2%
Kent County	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Montgomery County	4.4%	4.8%	11.5%	14.3%	25.0%	13.3%
Prince George's County	2.6%	2.6%	1.7%	5.1%	9.1%	4.0%
Queen Anne's County	2.5%	2.6%	2.9%	0.0%	—	0.6%
St. Mary's County	4.3%	3.4%	3.6%	3.8%	3.7%	1.8%
Somerset County	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Talbot County	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Washington County	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Wicomico County	0.0%	0.0%	4.8%	0.0%	0.0%	1.7%
Worcester County	0.0%	0.0%	—	0.0%	—	0.6%
Maryland	1.9%	2.7%	3.6%	3.2%	4.2%	4.0%

Sources: Annual Local Tobacco Grant Applications and 2000 Census

Table B-47. Percentage of Native American Tobacco Coalition Members by Jurisdiction and Fiscal Year, and 2000 Census

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	2.6%	0.0%	0.0%	0.0%	0.0%	0.2%
Anne Arundel County	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Baltimore City	0.4%	0.9%	2.9%	0.8%	0.9%	0.3%
Baltimore County	0.0%	0.0%	0.0%	1.5%	3.3%	1.0%
Calvert County	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Caroline County	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Carroll County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Cecil County	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Charles County	0.0%	1.8%	1.6%	1.5%	1.5%	0.8%
Dorchester County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Frederick County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Garrett County	0.0%	0.0%	0.0%	0.0%	—	0.1%
Harford County	2.4%	1.9%	1.8%	1.8%	1.9%	0.2%
Howard County	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Kent County	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Montgomery County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Prince George's County	1.3%	1.3%	1.7%	1.3%	0.0%	0.2%
Queen Anne's County	0.0%	0.0%	0.0%	2.9%	—	0.2%
St. Mary's County	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Somerset County	0.0%	0.0%	3.7%	0.0%	—	0.4%
Talbot County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Washington County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Wicomico County	0.0%	0.0%	2.4%	0.0%	0.0%	0.2%
Worcester County	0.0%	0.0%	—	0.0%	—	0.2%
Maryland	0.4%	0.5%	0.9%	0.6%	0.6%	0.3%

Sources: Annual Local Tobacco Grant Applications and 2000 Census

Table B-48. Tobacco Coalition Membership by Jurisdiction and Fiscal Year

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006
Allegany County	38	54	66	48	47
Anne Arundel County	15	26	17	22	19
Baltimore City	480	349	136	368	111
Baltimore County	52	31	35	68	60
Calvert County	30	33	45	45	35
Caroline County	19	19	24	23	28
Carroll County	28	46	22	37	35
Cecil County	23	26	77	65	17
Charles County	51	58	66	68	68
Dorchester County	34	31	28	30	38
Frederick County	31	36	42	30	31
Garrett County	20	23	21	20	18
Harford County	41	56	56	58	53
Howard County	19	26	21	18	26
Kent County	14	29	44	45	30
Montgomery County	45	43	52	44	20
Prince George's County	80	90	60	81	44
Queen Anne's County	40	38	35	35	—
St. Mary's County	18	20	29	31	27
Somerset County	30	30	28	27	29
Talbot County	33	38	30	30	29
Washington County	42	57	49	41	34
Wicomico County	29	38	42	32	32
Worcester County	30	32	—	44	—
Maryland	1,242	1,229	1,025	1,310	831

— = Data were not available
Source: Annual Local Tobacco Grant Proposals

Table B-49. Coalition Members, Subvendors, and Funding for Faith Based Organizations by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	1	0	\$0	1	0	\$0	2	2	\$4,336	2	1	\$500	1	0	\$0
Anne Arundel	1	0	\$0	1	0	\$0	0	0	\$0	3	0	\$0	1	8	\$8,400
Baltimore City	—	3	\$70,324	35	—	—	13	10	\$115,140	34	1	\$10,000	32	0	\$0
Baltimore Co	1	2	\$19,227	1	2	\$37,050	3	1	\$20,000	7	2	\$30,000	8	0	\$0
Calvert	1	0	\$0	2	0	\$0	3	0	\$0	2	0	\$0	1	1	\$3,000
Caroline	2	2	\$2,437	1	0	\$0	3	—	—	2	7	\$6,930	2	2	\$1,929
Carroll	0	1	\$3,538	9	5	\$13,503	4	3	\$8,400	10	3	\$8,600	9	0	\$0
Cecil	1	6	\$3,600	0	7	\$4,200	3	7	\$4,200	2	4	\$2,400	3	1	\$530
Charles	1	0	\$0	2	2	\$13,685	8	2	\$6,581	3	0	\$0	5	0	\$0
Dorchester	2	0	\$0	2	2	\$400	2	4	\$6,600	2	0	\$0	2	1	\$5,000
Frederick	1	1	\$12,430	1	1	\$5,000	2	1	\$4,000	1	0	\$0	1	0	\$0
Garrett	0	0	\$0	0	0	\$0	0	—	—	0	0	\$0	0	0	\$0
Harford	5	1	\$2,000	6	1	\$8,000	6	—	—	6	0	\$0	6	0	\$0
Howard	1	0	\$0	1	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Kent	0	0	\$0	10	—	—	11	0	\$0	11	0	\$0	12	0	\$0
Montgomery	3	0	\$0	3	1	\$50,000	5	1	\$50,000	5	1	\$35,000	3	2	\$70,000
Prince George's	3	0	\$0	5	0	\$0	0	0	\$0	1	0	\$0	1	0	\$0
Queen Anne's	1	3	\$2,357	3	—	—	3	8	\$6,475	3	0	\$0	—	6	\$4,200
Somerset	2	0	\$0	2	0	\$0	1	0	\$0	3	0	\$0	4	0	\$0
St. Mary's	1	2	\$7,000	1	0	\$0	0	0	\$0	0	1	\$2,000	0	0	\$0
Talbot	0	2	\$2,500	0	3	\$3,000	3	4	\$5,000	2	3	\$2,640	2	1	\$1,700
Washington	0	5	\$11,250	2	0	\$0	1	0	\$0	2	0	\$0	4	6	\$5,020
Wicomico	1	3	\$11,400	6	0	\$0	7	0	\$0	5	1	\$6,000	5	0	\$0
Worcester	3	0	\$0	3	0	\$0	—	0	\$0	2	0	\$0	—	0	\$0
Maryland	31	31	\$148,063	97	24	\$134,838	80	43	\$230,732	108	24	\$104,070	102	28	\$99,779

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Proposals; Subvendor information – Annual Local Subvendor Summary Reports

Table B-50. Coalition Members, Subvendors, and Funding for Community Based Organizations by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	3	0	\$0	15	3	\$7,660	28	5	\$15,951	17	5	\$10,120	13	4	\$11,500.00
Anne Arundel	1	5	\$112,800	2	2	\$93,900	0	4	\$72,025	0	3	\$66,000	1	2	\$19,000.00
Baltimore City	—	6	\$27,825	64	—	—	53	8	\$81,069	84	2	\$28,000	61	2	\$6,000.00
Baltimore Co	10	8	\$158,912	7	8	\$165,436	10	7	\$144,423	22	4	\$401,000	29	2	\$360,000.00
Calvert	8	2	\$39,926	10	7	\$25,885	17	6	\$24,612	18	6	\$37,917	15	8	\$36,939.00
Caroline	0	2	\$1,444	1	3	\$2,900	1			3	6	\$5,800	6	15	\$10,451.77
Carroll	6	4	\$20,001	11	3	\$47,461	4	5	\$22,370	6	4	\$7,999	7	3	\$9,625.00
Cecil	5	0	\$0	8	1	\$600	12	1	\$600	10	2	\$1,200	1	5	\$2,650.00
Charles	17	4	\$46,585	20	4	\$30,554	21	5	\$19,474	21	1	\$2,960	26	4	\$13,289.00
Dorchester	6	1	\$2,027	8	0	\$0	3	1	\$900	7	2	\$6,800	17	2	\$5,000.00
Frederick	7	3	\$61,967	7	11	\$92,270	12	8	\$87,143	10	6	\$43,838	11	6	\$42,727.00
Garrett	3	0	\$0	4	0	\$0	2	—	—	3	9	\$4,025	2	5	\$4,000.00
Harford	16	5	\$91,500	25	4	\$86,754	25	—	—	24	4	\$40,001	25	6	\$42,339.81
Howard	5	4	\$152,806	11	4	\$95,027	8	2	\$60,000	9	4	\$70,000	12	3	\$48,000.00
Kent	5	2	\$11,465	5	—	—	4	3	\$22,854	4	3	\$18,045	3	4	\$19,572.00
Montgomery	9	5	\$386,000	12	5	\$265,000	12	3	\$80,000	11	3	\$65,000	9	1	\$35,000.00
Prince George's	17	4	\$207,313	35	3	\$175,055	14	3	\$131,000	11	7	\$159,000	13	7	\$159,000.00
Queen Anne's	5	1	\$500	6	—	—	6	5	\$9,318	6	2	\$5,207	—	4	\$3,391.00
Somerset	5	3	\$12,666	7	2	\$3,220	11	5	\$34,970	10	7	\$30,559	8	5	\$29,288.50
St. Mary's	3	7	\$30,753	2	6	\$41,686	2	6	\$32,208	3	7	\$33,357	5	2	\$8,089.00
Talbot	7	2	\$1,670	7	2	\$1,838	8	4	\$3,170	8	7	\$7,510	7	4	\$4,300.00
Washington	8	10	\$41,872	12	8	\$39,000	12	8	\$28,958	16	7	\$22,552	10	7	\$25,051.00
Wicomico	6	4	\$22,060	11	2	\$13,594	11	4	\$21,391	7	0	\$0	6	2	\$16,000.00
Worcester	8	4	\$5,493	7	3	\$4,715	0	3	\$6,112	12	4	\$6,130	—	4	\$7,131.00
Maryland	160	86	\$1,435,585	297	81	\$1,192,555	276	96	\$898,548	322	105	\$1,073,020	287	107	\$918,344.08

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-51. Coalition Members, Subvendors, and Funding for Local Businesses by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	0	0	\$0	0	0	\$0	0	1	\$847	0	1	\$880	1	0	\$0
Anne Arundel	0	1	\$6,000	0	0	\$0	0	1	\$1,465	1	1	\$4,550	0	2	\$18,596
Baltimore City	—	0	\$0	3	—	—	0	0	\$0	3	2	\$30,500	0	0	\$0
Baltimore Co	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	1	0	\$0
Calvert	2	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0
Caroline	1	0	\$0	1	0	\$0	0	—	—	0	1	\$1,020	0	1	\$500
Carroll	1	1	\$32,450	1	1	\$20,000	0	1	\$17,000	0	2	\$29,000	0	2	\$24,000
Cecil	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Charles	1	0	\$0	1	0	\$0	1	0	\$0	0	0	\$0	3	0	\$0
Dorchester	1	0	\$0	0	6	\$1,200	3	4	\$1,200	0	10	\$2,000	4	4	\$1,000
Frederick	0	0	\$0	0	0	\$0	1	0	\$0	0	0	\$0	1	2	\$10,000
Garrett	1	0	\$0	0	0	\$0	0	—	—	0	0	\$0	0	0	\$0
Harford	2	1	\$1,500	1	0	\$0	1	—	—	2	3	\$13,542	2	0	\$0
Howard	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Kent	0	0	\$0	0	—	—	0	0	\$0	1	0	\$0	0	0	\$0
Montgomery	2	0	\$0	2	1	\$50,000	2	2	\$70,000	1	2	\$55,000	1	2	\$80,000
Prince George's	3	0	\$0	3	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Queen Anne's	0	0	\$0	0	—	—	0	0	\$0	0	0	\$0	—	0	\$0
Somerset	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
St. Mary's	3	0	\$0	1	0	\$0	2	0	\$0	0	0	\$0	2	1	\$1,486
Talbot	2	0	\$0	2	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Washington	0	0	\$0	1	1	\$3,821	2	0	\$0	1	0	\$0	1	0	\$0
Wicomico	0	0	\$0	1	0	\$0	2	0	\$0	0	0	\$0	0	0	\$0
Worcester	0	1	\$1,650	0	1	\$1,360	—	1	\$2,000	0	0	\$0	—	0	\$0
Maryland	19	4	\$41,600	18	10	\$76,381	15	10	\$92,512	10	22	\$136,492	17	14	\$135,596

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-52. Coalition Members, Subvendors, and Funding for Health Organizations by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	3	0	\$0	3	1	\$5,000	8	0	\$0	5	1	\$1,500	6	0	\$0
Anne Arundel	3	3	\$36,000	8	3	\$39,670	4	4	\$35,000	4	4	\$30,000	6	4	\$38,000
Baltimore City	—	8	\$286,000	90	—	—	28	15	\$312,090	93	7	\$137,484	78	9	\$179,550
Baltimore Co	12	7	\$153,484	10	6	\$143,747	10	3	\$47,796	17	1	\$10,000	10	0	\$0
Calvert	4	2	\$42,260	3	2	\$14,530	5	1	\$5,070	5	2	\$19,050	3	2	\$9,150
Caroline	2	0	\$0	1	0	\$0	2	—	—	1	0	\$0	3	0	\$0
Carroll	2	2	\$5,636	3	3	\$22,704	2	0	\$0	3	1	\$11,000	3	1	\$11,000
Cecil	4	0	\$0	4	0	\$0	22	0	\$0	10	0	\$0	2	0	\$0
Charles	11	0	\$0	15	0	\$0	15	0	\$0	10	1	\$7,961	11	0	\$0
Dorchester	5	1	\$4,200	5	1	\$3,000	4	0	\$0	6	0	\$0	2	0	\$0
Frederick	2	0	\$0	3	3	\$21,750	6	5	\$29,815	3	3	\$24,326	6	4	\$30,000
Garrett	3	0	\$0	2	0	\$0	4	—	—	2	0	\$0	2	0	\$0
Harford	2	3	\$15,000	5	3	\$27,000	4	—	—	6	2	\$7,816	4	0	\$0
Howard	1	1	\$34,040	1	1	\$27,000	2	1	\$20,000	1	1	\$20,000	3	1	\$20,000
Kent	4	0	\$0	5	—	—	7	0	\$0	7	0	\$0	5	0	\$0
Montgomery	1	0	\$0	1	1	\$70,000	2	1	\$70,000	1	1	\$40,000	2	1	\$40,000
Prince George's	23	1	\$0	20	3	\$74,208	10	1	\$42,232	9	1	\$30,000	4	1	\$30,000
Queen Anne's	4	0	\$0	4	0	\$0	4	0	\$0	3	0	\$0	—	0	\$0
Somerset	1	0	\$0	3	—	—	4	1	\$3,971	2	0	\$0	2	0	\$0
St. Mary's	6	2	\$24,924	7	4	\$31,871	5	3	\$31,508	4	2	\$6,507	4	1	\$3,350
Talbot	6	0	\$0	6	0	\$0	6	0	\$0	4	0	\$0	5	1	\$550
Washington	3	1	\$5,000	8	0	\$0	9	1	\$3,000	3	2	\$14,610	3	1	\$5,110
Wicomico	4	0	\$0	3	1	\$3,106	3	0	\$0	3	0	\$0	3	0	\$0
Worcester	3	1	\$1,000	6	2	\$2,310	—	1	\$1,950	5	2	\$2,900	—	0	\$0
Maryland	109	32	\$607,544	216	34	\$485,896	166	37	\$602,432	207	31	\$363,154	167	26	\$366,736

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-53. Coalition Members, Subvendors, and Funding for K-12 Schools by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	5	1	\$32,777	7	2	\$55,930	3	4	\$30,180	7	7	\$23,369	9	5	\$16,591
Anne Arundel	1	0	\$0	0	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0
Baltimore City	—	0	\$0	5	—	—	5	2	\$0	6	2	\$42,158	9	3	\$60,039
Baltimore Co	4	4	\$195,693	3	3	\$52,280	3	1	\$165,657	4	1	\$150,000	6	1	\$130,000
Calvert	3	1	\$25,632	3	1	\$27,090	2	1	\$10,092	2	0	\$0	1	1	\$5,000
Caroline	3	3	\$1,523	1	1	\$2,411	3	—	—	4	2	\$21,917	5	0	\$0
Carroll	3	2	\$18,031	2	3	\$28,429	1	4	\$43,375	1	4	\$32,461	1	2	\$23,600
Cecil	1	0	\$0	2	0	\$0	4	0	\$0	3	0	\$0	1	0	\$0
Charles	3	1	\$52,919	4	1	\$51,718	3	1	\$41,405	4	1	\$35,076	4	1	\$35,076
Dorchester	0	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0
Frederick	1	1	\$40,373	1	1	\$33,728	1	3	\$13,801	1	2	\$10,000	3	1	\$7,165
Garrett	2	1	\$9,098	2	1	\$9,098	2	—	—	2	1	\$15,000	2	1	\$15,000
Harford	3	1	\$9,300	0	1	\$36,259	0	—	—	1	0	\$0	1	1	\$29,000
Howard	4	1	\$65,630	1	1	\$65,630	1	1	\$42,502	1	2	\$53,000	1	3	\$44,316
Kent	1	1	\$6,387	1	—	—	1	1	\$14,312	1	1	\$13,106	1	2	\$13,160
Montgomery	3	1	\$45,000	4	1	\$60,000	3	1	\$80,000	4	1	\$80,000	1	1	\$80,000
Prince George's	2	1	\$190,089	4	1	\$190,089	19	1	\$102,807	30	1	\$88,000	6	1	\$88,000
Queen Anne's	2	0	\$0	1	—	—	1	0	\$0	2	2	\$5,190	—	1	\$200
Somerset	1	1	\$9,571	1	1	\$9,572	2	2	\$16,679	2	2	\$76,110	2	2	\$16,105
St. Mary's	0	2	\$19,131	0	2	\$8,958	0	2	\$13,075	1	2	\$13,161	0	1	\$10,000
Talbot	1	1	\$7,800	2	2	\$10,000	1	3	\$14,000	1	2	\$12,000	1	0	\$0
Washington	13	1	\$26,230	11	1	\$22,296	2	1	\$11,265	1	1	\$9,759	1	1	\$4,082
Wicomico	3	1	\$31,690	3	1	\$31,690	3	1	\$24,353	2	1	\$22,000	2	1	\$17,000
Worcester	1	2	\$16,629	1	3	\$17,629	—	4	\$21,014	1	3	\$18,085	—	3	\$27,066
Maryland	60	27	\$803,503	60	27	\$712,807	62	33	\$644,517	83	38	\$720,392	59	32	\$621,432

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-54. Coalition Members, Subvendors, and Funding for Higher Education Organizations by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	2	1	\$14,048	2	2	\$13,982	3	2	\$15,840	3	2	\$14,310	2	2	\$11,061
Anne Arundel	1	2	\$34,996	1	1	\$10,000	1	0	\$0	1	0	\$0	1	0	\$0
Baltimore City	—	1	\$21,966	30	0	\$0	4	9	\$56,640	40	2	\$32,771	31	2	\$67,000
Baltimore Co	1	6	\$89,810	1	—	—	1	6	\$72,000	4	1	\$30,000	4	4	\$36,000
Calvert	2	1	\$16,159	3	1	\$15,172	3	1	\$17,554	3	1	\$16,143	2	1	\$14,027
Caroline	1	0	\$0	1	0	\$0	1	—	—	1	0	\$0	0	1	\$800
Carroll	0	2	\$7,176	1	2	\$25,945	0	3	\$33,680	0	2	\$16,740	0	1	\$3,750
Cecil	1	0	—	1	0	\$0	2	0	\$0	1	1	\$600	0	1	\$530
Charles	4	1	\$26,460	5	1	\$25,859	5	2	\$35,298	5	1	\$21,167	4	1	\$0
Dorchester	1	0	\$0	3	0	\$0	3	0	\$0	3	0	\$0	5	0	\$0
Frederick	2	3	\$20,043	3	0	\$0	3	1	\$6,425	1	1	\$4,500	0	0	\$21,167
Garrett	2	1	\$3,500	3	1	\$3,500	2	—	—	3	1	\$740	2	1	\$750
Harford	2	1	\$26,360	4	1	\$42,505	4	—	—	4	0	\$0	4	0	\$0
Howard	0	1	\$32,815	1	1	\$32,815	1	1	\$20,750	1	1	\$20,000	1	1	\$15,000
Kent	0	0	\$0	0	—	—	1	1	\$7,393	2	1	\$6,554	1	0	\$0
Montgomery	5	1	\$95,000	5	1	\$90,000	6	1	\$50,000	4	1	\$42,000	0	1	\$32,000
Prince George's	5	4	\$131,301	8	2	\$46,438	3	2	\$69,914	3	2	\$50,000	3	1	\$25,000
Queen Anne's	1	0	\$0	1	—	—	1	0	\$0	1	0	\$0	—	1	\$1,542
Somerset	1	1	\$4,785	0	3	\$9,051	0	1	\$9,912	1	1	\$2,800	0	1	\$4,000
St. Mary's	2	2	\$16,879	1	2	\$15,658	2	2	\$15,781	2	1	\$6,733	2	2	\$12,000
Talbot	0	0	\$0	0	0	\$0	0	0	\$0	1	0	\$0	1	0	\$0
Washington	0	2	\$12,486	2	2	\$8,708	2	1	\$4,082	2	1	\$4,082	1	0	\$0
Wicomico	2	3	\$15,845	4	3	\$18,345	2	1	\$11,315	4	1	\$7,000	4	1	\$6,650
Worcester	3	1	\$8,564	3	2	\$9,924	—	1	\$11,315	1	2	\$11,981	—	1	\$1,220
Maryland	38	34	\$394,038	83	25	\$367,902	50	35	\$437,899	91	23	\$288,121	68	23	\$252,520

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-55. Coalition Members, Subvendors, and Subvendor Funding for Local Government by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	14	0	\$0	14	1	\$1,500	10	0	\$0	11	0	\$0	10	1	\$1,000
Anne Arundel	3	0	\$0	7	0	\$0	3	0	\$0	6	0	\$0	3	1	\$18,600
Baltimore City	—	6	\$212,000	88	—	—	26	1	\$40,000	82	0	\$0	65	2	\$78,000
Baltimore Co	14	0	\$0	8	0	\$0	7	0	\$0	8	0	\$0	0	0	\$0
Calvert	5	0	\$0	3	0	\$0	4	0	\$0	4	0	\$0	5	0	\$0
Caroline	6	0	\$0	5	0	\$0	6	—	—	7	0	\$0	6	0	\$0
Carroll	10	0	\$0	10	0	\$0	7	0	\$0	10	0	\$0	9	0	\$0
Cecil	8	0	\$0	3	0	\$0	22	0	\$0	25	0	\$0	5	0	\$0
Charles	10	0	\$0	8	0	\$0	8	0	\$0	10	0	\$0	11	0	\$0
Dorchester	11	0	\$0	9	0	\$0	6	0	\$0	7	0	\$0	6	0	\$0
Frederick	8	0	\$0	12	2	\$9,910	9	0	\$0	7	0	\$0	8	1	\$3,108
Garrett	4	0	\$0	5	0	\$0	6	—	—	5	2	\$750	5	0	\$0
Harford	5	0	\$0	10	0	\$0	9	—	—	8	0	\$0	5	0	\$0
Howard	4	0	\$0	5	0	\$0	4	1	\$9,584	4	1	\$6,000	4	1	\$5,000
Kent	2	0	\$0	7	—	—	10	2	\$14,754	10	2	\$13,647	6	2	\$12,897
Montgomery	14	0	\$0	14	2	\$30,000	14	0	\$0	13	0	\$0	4	0	\$0
Prince George's	14	0	\$0	10	0	\$0	7	0	\$0	11	0	\$0	9	0	\$0
Queen Anne's	10	0	\$0	10	—	—	6	0	\$0	5	0	\$0	—	0	\$0
Somerset	4	1	\$6,969	4	1	\$6,969	4	0	\$0	4	0	\$0	6	1	\$4,167
St. Mary's	6	0	\$0	7	1	\$5,372	7	1	\$6,367	6	0	\$0	6	0	\$0
Talbot	7	0	\$0	12	0	\$0	5	0	\$0	5	0	\$0	5	0	\$0
Washington	8	4	\$10,000	11	1	\$4,274	9	0	\$0	5	1	\$4,000	5	1	\$6,700
Wicomico	10	1	\$5,000	8	1	\$9,300	9	1	\$6,000	8	0	\$0	7	0	\$0
Worcester	3	1	\$500	5	0	\$0	0	0	\$0	17	0	\$0	—	0	\$0
Maryland	180	13	\$234,469	275	9	\$67,325	198	6	\$76,705	278	6	\$24,397	190	10	\$129,482

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-56. Coalition Members, Subvendors, and Funding for Law Enforcement by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	4	1	\$13,625	4	2	\$28,879	4	1	\$10,128	2	1	\$7,427	2	2	\$9,690
Anne Arundel	2	1	\$25,000	2	0	\$0	1	1	\$5,000	1	0	\$0	1	0	\$0
Baltimore City	—	0	\$0	3	—	—	0	1	\$0	3	0	\$0	2	0	\$0
Baltimore Co	1	0	\$0	1	0	\$0	1	0	\$0	2	0	\$0	1	0	\$0
Calvert	3	1	\$18,516	6	0	\$0	7	1	\$9,914	7	2	\$20,031	6	3	\$11,881
Caroline	3	0	\$0	3	0	\$0	3	—	—	3	0	\$0	2	0	\$0
Carroll	3	1	\$26,742	3	1	\$20,269	1	1	\$13,241	2	1	\$13,017	1	1	\$18,000
Cecil	2	0	\$0	4	0	\$0	7	0	\$0	5	0	\$0	2	7	\$8,300
Charles	2	1	\$24,075	3	1	\$25,506	4	1	\$22,444	5	1	\$18,808	5	1	\$17,868
Dorchester	3	2	\$5,100	3	1	\$2,539	4	1	\$3,000	3	3	\$2,500	2	3	\$2,506
Frederick	5	1	\$11,237	5	0	\$0	2	0	\$0	1	0	\$0	0	0	\$0
Garrett	3	1	\$500	3	1	\$848	3	—	—	3	3	\$1,246	3	3	\$938
Harford	1	0	\$0	1	0	\$0	1	—	—	1	0	\$0	1	0	\$0
Howard	2	0	\$0	1	0	\$0	1	0	\$0	0	0	\$0	0	0	\$0
Kent	0	0	\$0	0	—	—	5	0	\$0	5	0	\$0	0	0	\$0
Montgomery	0	1	\$109,182	1	0	\$0	0	0	\$0	2	0	\$0	0	0	\$0
Prince George's	0	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0	0	0	\$0
Queen Anne's	2	0	\$0	1	—	—	2	0	\$0	2	0	\$0	—	0	\$0
Somerset	1	2	\$5,484	1	2	\$5,483	1	1	\$14,455	1	2	\$12,380	1	1	\$12,385
St. Mary's	1	1	\$18,887	1	1	\$13,452	1	1	\$14,052	1	1	\$12,197	1	1	\$12,985
Talbot	2	0	\$0	2	0	\$0	1	0	\$0	1	0	\$0	0	1	\$1,000
Washington	2	1	\$15,029	3	2	\$25,722	3	1	\$13,601	2	1	\$7,905	2	1	\$7,905
Wicomico	3	1	\$18,156	2	1	\$18,156	2	1	\$20,000	1	1	\$20,027	2	1	\$15,000
Worcester	2	1	\$5,000	2	1	\$4,000		2	\$5,000	1	1	\$1,900	—	1	\$2,000
Maryland	47	16	\$296,533	56	13	\$144,854	55	13	\$115,707	55	17	\$117,438	34	26	\$120,458

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-57. Coalition Members, Subvendors, and Subvendor Funding for Media by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	1	0	\$0	2	0	\$0	2	0	\$0	1	0	\$0	1	0	\$0
Anne Arundel	0	5	\$210,305	2	1	\$220,600	0	2	\$135,750	0	2	\$110,701	0	1	\$72,796
Baltimore City	—	0	\$0	21	—	—	2	0	\$0	8	1	\$51,828	9	0	\$0
Baltimore Co	2	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Calvert	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Caroline	0	0	\$0	0	0	\$0	1	—	—	0	0	\$0	0	0	\$0
Carroll	1	0	\$0	1	0	\$0	0	0	\$0	1	0	\$0	0	0	\$0
Cecil	0	0	\$0	1	0	\$0	0	0	\$0	1	0	\$0	0	0	\$0
Charles	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Dorchester	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Frederick	1	0	\$0	1	0	\$0	1	0	\$0	0	0	\$0	0	0	\$0
Garrett	0	0	\$0	0	0	\$0	0	—	—	0	0	\$0	0	0	\$0
Harford	2	0	\$0	1	0	\$0	1	—	—	1	0	\$0	1	0	\$0
Howard	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Kent	0	0	\$0	0	—	—	0	0	\$0	0	0	\$0	0	0	\$0
Montgomery	1	0	\$0	1	1	\$20,000	1	0	\$0	1	0	\$0	0	0	\$0
Prince George's	1	0	\$0	1	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Queen Anne's	0	0	\$0	0	—	—	0	0	\$0	0	0	\$0	—	0	\$0
Somerset	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
St. Mary's	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Talbot	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Washington	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Wicomico	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Worcester	0	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0	—	0	\$0
Maryland	9	5	\$210,305	31	2	\$240,600	8	2	\$135,750	13	3	\$162,529	11	1	\$72,796

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-58. Coalition Members, Subvendors, and Subvendor Funding for Individuals by Jurisdiction and Fiscal Year

Jurisdiction	FY2002			FY2003			FY2004			FY2005			FY2006		
	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding	Coalition Members	Sub-vendors	Funding
Allegany	2	0	\$0	5	0	\$0	0	0	\$0	0	0	\$0	0	0	\$0
Anne Arundel	2	0	\$0	3	1	\$1,025	5	2	\$2,425	3	0	\$0	4	0	\$0
Baltimore City	—	3	\$750	5	—	—	0	0	\$0	5	0	\$0	2	0	\$0
Baltimore Co	1	0	\$0	0	0	\$0	0	1	\$40,000	0	0	\$0	2	0	\$0
Calvert	2	0	\$0	1	0	\$0	1	0	\$0	1	0	\$0	0	0	\$0
Caroline	0	0	\$0	5	0	\$0	4	—	—	2	0	\$0	4	0	\$0
Carroll	1	0	\$0	4	0	\$0	1	1	\$4,701	2	1	\$6,000	0	0	\$0
Cecil	1	0	\$0	3	0	\$0	4	0	\$0	8	0	\$0	2	0	\$0
Charles	0	0	\$0	0	0	\$0	0	0	\$0	2	0	\$0	1	0	\$0
Dorchester	1	0	\$0	0	2	\$400	0	9	\$6,500	0	0	\$0	1	0	\$0
Frederick	1	0	\$0	3	0	\$0	0	0	\$0	2	0	\$0	1	0	\$0
Garrett	2	0	\$0	4	0	\$0	2	—	—	2	0	\$0	1	0	\$0
Harford	2	1	\$4,000	3	0	\$0	3	—	—	4	0	\$0	5	0	\$0
Howard	2	0	\$0	4	0	\$0	2	0	\$0	2	0	\$0	4	0	\$0
Kent	2	0	\$0	1	—	—	1	0	\$0	3	0	\$0	2	0	\$0
Montgomery	0	0	\$0	0	0	\$0	1	0	\$0	0	0	\$0	1	0	\$0
Prince George's	1	0	\$0	3	0	\$0	0	0	\$0	10	0	\$0	0	0	\$0
Queen Anne's	15	0	\$0	12	—	—	12	0	\$0	13	0	\$0	—	0	\$0
Somerset	2	0	\$0	2	0	\$0	5	0	\$0	6	0	\$0	2	0	\$0
St. Mary's	4	0	\$0	10	0	\$0	2	0	\$0	9	0	\$0	1	0	\$0
Talbot	8	0	\$0	7	0	\$0	6	0	\$0	8	0	\$0	8	0	\$0
Washington	6	0	\$0	6	0	\$0	8	0	\$0	6	1	\$2,500	1	0	\$0
Wicomico	0	0	\$0	0	0	\$0	2	0	\$0	2	0	\$0	3	0	\$0
Worcester	6	0	\$0	5	0	\$0	—	0	\$0	5	0	\$0	—	0	\$0
Maryland	61	4	\$4,750	86	3	\$1,425	59	13	\$53,626	95	2	\$8,500	45	0	\$0

— = No data available

Sources: Coalition Members – Annual Local Tobacco Grant Applications; Subvendor information – Annual Local Subvendor Summary Reports

Table B-59. Local Tobacco Full Time Equivalent Program Staff by Jurisdiction and Fiscal Year

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006
Allegany County	2.00	1.75	1.75	1.75	1.60
Anne Arundel County	9.58	7.81	7.68	7.68	7.58
Baltimore City	5.10	5.26	3.70	3.70	4.10
Baltimore County	6.70	6.15	5.52	5.52	3.22
Calvert County	0.87	1.30	1.50	1.50	1.80
Caroline County	0.61	0.78	0.95	0.95	0.74
Carroll County	0.80	1.05	1.47	1.47	1.20
Cecil County	2.50	2.38	1.85	1.85	2.00
Charles County	2.12	2.15	1.95	1.95	2.47
Dorchester County	0.83	1.23	1.15	1.15	0.84
Frederick County	3.81	3.36	2.55	2.55	3.57
Garrett County	1.23	1.05	1.40	1.40	1.45
Harford County	4.33	4.60	4.60	4.60	4.00
Howard County	3.20	2.08	2.62	2.62	3.40
Kent County	0.18	0.18	0.38	0.38	0.48
Montgomery County	4.30	3.30	3.99	3.99	4.18
Prince George's County	5.83	4.61	4.41	4.41	4.16
Queen Anne's County	1.05	1.07	1.08	1.08	0.90
St. Mary's County	0.71	1.09	1.08	1.08	1.10
Somerset County	0.18	0.20	0.40	0.40	0.35
Talbot County	0.65	0.71	1.35	1.35	1.31
Washington County	2.50	2.50	2.40	2.40	2.53
Wicomico County	1.31	0.43	1.53	1.53	1.78
Worcester County	0.90	0.65	1.18	1.18	1.25
Maryland	61.25	55.66	56.50	56.50	55.98

Source: Annual Local Tobacco Program Grant Proposal Budgets

Appendix C: Tobacco Analysis Methodology and Definitions

The purpose of the economic analysis is to determine the impact on the economy of Maryland for those persons who quit, or do not start, smoking. The methodology involves identifying the economic costs of smoking and estimating the dollar value of those costs for a smoker. We also try to estimate the economic impact of increasing or reducing smoking prevalence. It is, however, important to note that the economic analysis will not identify the portion of economic costs directly attributable to the work of the Tobacco Program, due to data limitations.

The cost of smoking is the subject of a number of recent research projects and published literature. The methodology used for this study will include estimates from a number of different articles to illustrate the range in economic costs based on various assumptions. The following provides a description of the various methodologies and assumptions in the literature and a summary of the methodology.

Relevant Literature

The recent literature offers a variety of approaches that could be applied to our economic impact analysis of smoking to the State of Maryland. Some of the analyses have resulted in national estimates, and others have focused on specific states. Optimal's approach is to apply to the present work a sound methodology already available in the literature.

A clear statement of the general methodology Optimal will employ is available in the 1998 U.S. Treasury report, *The Economic Costs of Smoking in the United States and the Benefits of Comprehensive Tobacco Legislation*. A number of studies discussed below make use of some variant of this report's methodology. However, refinements of this methodology from a more recent study, *The Price of Smoking* (Sloan et al., 2004) will be incorporated as well.

1998 U.S. Treasury Study

In the 1998 U.S. Treasury study (1998), the focus is on measuring economic costs of smoking. In this context, "economic cost" refers to the cost of resources consumed by society as a result of smoking, such as doctors' time and other medical costs, and output lost due to early death or workers' illness. Further, economic costs do not include *financial transfers* such as taxes levied on cigarettes or Medicaid/Social Security payments.

The economic costs of smoking is defined as *the sum of the costs smokers impose upon themselves, or internal costs, and the costs smokers impose upon others, i.e., external costs*.

Regardless of whether the costs are internal or external, a key question is whether they are measurable, and, if so, how they should be measured. The report does not utilize a single conceptual model that covers all costs; instead it utilizes results available in the literature to build up its cost estimates.

This study uses a cross-sectional or "prevalence-based" approach to measuring the costs attributable to smoking. The primary question addressed by this approach is: "In a year, how much is spent because people smoke?" The answer is based on the costs being incurred in a particular year.

The U.S. Treasury report categorized the costs in this way:

- Readily Measurable Costs
 - *Adult medical spending*. This is the net extra medical expenditure due to smoking. It takes into account that savings from smoking cessation would be partially offset by the extra medical expenses resulting from increased longevity.

- *Smoking during pregnancy.* These are the increased costs resulting from complicated deliveries, medical care of low-weight babies — in their first year of life and throughout their adolescence — and developmental difficulties. They do not take into account costs that are more difficult to measure, like the increased risk of fetal death and the increased chance of post-adolescent problems for low-birth weight babies.
- *Lost output from shortened work lives.* Smokers tend to die younger and retire sooner than non-smokers, which leads to lost output and wages.
- *Lost output from lost workdays.* Smokers miss more work days than their non-smoking colleagues, which also leads to lost output.
- Damage caused by smoking-related fires.
- **Difficult-to-Measure Costs**
 - *Lower productivity in workers.* Some studies have found that smokers also earn lower wages when they are working — even after other observable differences between smokers and non-smokers are taken into account. Experts disagree, however, as to whether these estimates capture the true costs of smoking or simply reflect other differences between smokers and non-smokers that affect their earnings but are difficult for analysts to measure.
 - *Reduced lives.* The cost of smokers' shorter working lives has been included above; there are additional costs to individuals and society, above and beyond the cost of lost wages, of shorter lives. However, the measurement of these costs is subjective and controversial.
 - *Second hand smoke.* Exposure to second hand smoke imposes a serious health threat to infants, children, and adults. However, it is difficult to measure this.

Based on the estimates shown in Table C-1, it is clear that two costs (i) “Lost output from shortened work lives,” and (ii) “Adult medical spending,” together account for over 95 percent of the costs of smoking, based on readily measurable costs. Both of these are internal costs. “Smoking during pregnancy,” which is an external cost, is a distant third, with other factors making negligible contributions.

Table C-1: National Annual Economic Cost of Smoking

Type of cost	Cost (\$ 1998, in billions)	Share (percent)
Readily measurable costs		
Adult medical spending	45	35
Smoking during pregnancy	4	3
Lost output from shortened work lives	80	62
Lost output from lost workdays	0.5	0.4
Damage caused by smoking-related fires	0.5	0.4
TOTAL	130	100
Difficult-to-measure costs		
Value of reduced mortality	120	
Productivity reduction for smokers	50-125	

Note: Numbers may not add up due to rounding. Source: 1998 U.S. Treasury Study.

While the estimates of difficult-to-measure costs are tentative, the values are high. As noted above, since the focus of the study is on economic costs, financial costs such as taxes, subsidies, and Social Security payments are not considered.

Sloan et al. Study

In *The Price of Smoking* (Sloan, 2004), Sloan and his colleagues address two fundamental questions: First, if the individuals had not begun to smoke, what would have been the effect on resource use? Second, to what extent are nonsmokers harmed or benefited by smoking?

In this study, external costs are split into the *costs that smokers impose upon their families*, which are called “quasi-external costs,” and the *costs that smokers impose upon others*, which are labeled as “pure external costs.”

This study measures the cost of smoking from a life-cycle perspective, i.e., it measures the present value of the cost of adding a smoker to society. In any time period, such as a year, a certain number of people initiate the smoking habit. The life cycle approach assesses the net social cost of this additional smoker. The approach recognizes that each time a person begins the smoking habit; there are downstream implications for resource use – for the smoker, for the smoker’s family, and for others in society. Under this approach, one calculates the net present value of all lifetime costs for all individuals who become newly diagnosed (or who initiate a new behavior) in the base year. This essentially entails determining such costs for a typical individual and multiplying by the number of new cases expected that year.

The life cycle approach is advantageous for a number of important public policy applications; in particular, it is well suited to evaluating tobacco control programs that discourage initiation of smoking. However, this approach requires extensive data, whereas the cross-sectional approach used in most studies has the advantage of simplicity and greater ease of application with available data.

The Sloan study looks at essentially the same costs as the U.S. Treasury report, with three important differences:

- The Sloan study considers both economic and financial costs, i.e., apart from true resources costs, it also considers taxes, subsidies, Social Security payments, etc.
- The Sloan study’s costs are sub-divided into a larger number of categories.
- The Sloan study estimates some of the costs that were identified as difficult to measure by the U.S. Treasury study.

The overall cost estimates are presented in Table C-2. Note that these costs are not directly comparable with the U.S. Treasury study because the US Treasury study measured national annual costs, while the Sloan Study estimates life-cycle costs per 24-year-old smoker.

Table C-2. Life-Cycle Cost of Smoking per 24-Year-Old Smoker

Type of cost	Cost (\$ 2000)	Share (percent)
Private cost	141,181	83
Quasi-external costs	23,407	13
External costs	6,201	4
TOTAL	170,789	100

Note: Numbers may not add up due to rounding. Source: *The Price of Smoking*, 2004.

In other words, the present value of the future costs that will be imposed or incurred by a smoker who is currently 24 years old is \$170,789. It is clear that private costs form a dominant share of total costs, with purely external costs making only a small contribution.

The largest element of the life-cycle costs, shown in Table C-3 is “Mortality cost,” which is consistent with the tentative estimates derived in the U.S. Treasury report. The second largest element is “Disability cost,” which is also consistent with the high U.S. Treasury estimates of lost output.

Table C-3. Key Elements of Life-Cycle Cost per 24-Year-Old Smoker

Type of cost	Cost (\$ 2000)
Mortality cost (own + spouse)	109,777
Disability cost (own + spouse + others) including productivity and income loss	42,152
Cost of cigarettes	13,338
Social security and pension related	8,084
Medical costs	3,709
Infant deaths	611
TOTAL	170,789

Note: Numbers do not add up to the total as only the largest elements of the costs are shown in this table.
Source: *The Price of Smoking*, 2004.

What is quite different from the U.S. Treasury report estimates is the relatively low value of medical costs. The main reason for this difference is the life-cycle approach used in this study. This approach takes account of the fact that the increased medical costs of a 24-year-old smoker will come many years – or even decades – later. Further, the increased medical expenditures imposed by smoking are, to some extent, offset by the lower rate of survival of smokers, i.e., on average, smokers need medical care for fewer years than non-smokers.

This study also estimated the life-cycle value of future excise taxes paid by a 24-year-old smoker to be \$1,523 (Federal) and \$1,718 (State). These taxes would not be paid if a cessation program is successful. However, it should be noted that the money not spent on cigarettes would probably be spent on other commodities, which would also yield some tax revenues, i.e., the actual loss in revenues would be less than indicated by the above figures.

Although Sloan et al. (2004) presented an alternative way of estimating the economic cost of smoking, the life cycle approach accounts for cost savings arising from shorter life expectancy of smokers. This is against the commonly accepted notion that longer life is generally desirable. Therefore, we will not use the Sloan approach in this analysis.

SAMMEC

The Centers for Disease Control and Prevention (CDC) have developed a software program to estimate the costs of smoking. It is called SAMMEC (Smoking-Attributable Mortality, Morbidity and Economic Costs). The current SAMMEC application contains two distinct Internet-based computational programs that can be used to estimate the disease impact of smoking on adults and infants:

- *Adult SAMMEC* provides users the ability to estimate Smoking-Attributable Mortality, Years of Potential Life Lost (YPLL), medical expenditures, and productivity losses.
- *Maternal and Child Health (MCH) SAMMEC* provides users the ability to estimate smoking-attributable infant deaths, YPLL, and excess neonatal health care costs.

The CDC states that SAMMEC is designed to estimate the overall disease impact of smoking in a population, and is not designed for assessing the cost-effectiveness of public health programs aimed at reducing cigarette use. The reason is that the medical costs of smoking are “prevalence-based” estimates reflecting the impact of smoking on health care expenditures over a one-year period, whereas cost-effectiveness analyses of the benefits of smoking reduction programs require estimates of the discounted excess lifetime medical expenditures associated with smoking.

State studies that utilize SAMMEC are available for Massachusetts (2002), Wisconsin (2002), and Louisiana (1999). The results are shown in Table C-4.

Table C-4. Economic Costs in Three States

Type of cost	Cost (\$, in billions)		
	Massachusetts	Wisconsin	Louisiana
Medical expenditures	2.8	1.6	1.2
Lost productivity	1.6	1.4	1.7
Neonatal expenditures	0.005	-	-
TOTAL	4.4	3.0	2.9
Years of Potential Life lost	118,389	95,000	96,085

The medical cost estimates are relatively high, similar to the U.S. Treasury study, reflecting the underlying “prevalence-based” methodology used in this and the U.S. Treasury study. As discussed earlier, the “prevalence-based” methodology does not discount back future costs, and does not take account of the fact that non-smokers need medical care for more years than smokers.

A national study was conducted by the CDC in 2002, entitled *Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs – United States 1995-1999*. The results of that study are shown below in Table C-5.

Table C-5. Annual Smoking-Attributable Economic Costs of Smoking (U.S. 1995-1999)

Type of cost	National Cost (\$, in billions)	Per smoker (\$)
Medical expenditures	75	1,623
Lost productivity	83	1,760
Neonatal expenditures	0.4	8
TOTAL	158	3,391

Source: *Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs – United States 1995-1999, 2002*.

The estimates of lost productivity are similar to that of the U.S. Treasury report, but the medical expenditures reported are higher. One reason for this difference is that SAMMEC does not net out, as does the U.S. Treasury report, the extra medical expenses arising from longer lives of non-smokers. Further, the CDC estimates are significantly higher than the Sloan study. In particular, the Sloan study estimates the life-cycle medical costs to be only about \$3,700 per smoker, whereas the CDC report estimates the annual medical cost to be about \$1,600 per smoker, which would imply a life-cycle cost of over \$24,000 for 20 years at a 3 percent discount rate.

Barkey Study (Application of U.S. Treasury Report to Indiana)

Barkey (2000) applied the U.S. Treasury methodology to Indiana. This required some adjustments to existing studies to estimate the individual cost elements. The results of the analysis are shown in Table C-6.

Adult medical spending. This is based on updating a 1993 national study of medical costs that included state-by-state cost estimates. The estimated costs for 2000 were \$2 billion. Again, the relatively high estimate reflects the underlying “prevalence-based” approach.

Lost output from shortened work lives. Estimates are derived of how many early retirements are attributable to smoking. These are multiplied by average wages to calculate wages lost, and then scaled up to reflect the wage:output ratio. This shows a loss of \$ 1.4 billion.

Lost output from lost workdays, damage caused by smoking-related fires, smoking during pregnancy. These were simply extrapolated to Indiana from the U.S. Treasury national data. The total loss is \$108 million.

Table C-6. Annual Economic Costs of Smoking – Indiana

Type of cost	State Cost (\$ 2000, in billions)
Medical expenditures	2.0
Lost productivity	1.4
Neonatal expenditures	0.086
Productivity loss due to absenteeism	0.011
Damage from fires	0.011
TOTAL	3.5

Source: *The Price of Inaction: The Economic Impact of Tobacco Use in Indiana, 2000.*

Methodology

Based on the review of the literature, the three components of the economic costs of smoking that are consistently the largest include:

- Excessive medical expenditures
- Value of lives lost
- Productivity loss due to early death
- The link between excessive medical expenditure has been the most direct and well-established. Further, the methodology in estimating smoking-attributable medical expenditure has been the well researched. Apart from adult medical expenditures, it is also important to consider the economic impact of smoking during pregnancy because there are significant short-term costs associated with this. The analysis, therefore, is primarily focused on the component of excess medical expenditures due to smoking.

Additionally, value of lives lost and productivity loss due to smoking present considerable economic cost. Together with medical cost, they account for 95 percent or more of the economic costs of smoking, with other costs playing a minor role. Thus, we focus most of the effort at deriving estimates of these costs. Other minor costs, such as the damage caused by smoking-related fires, will be ignored as *de minimis*.

Excessive Adult Medical Expenditures

There are two methods available to estimate these costs: the Sloan study, SAMMEC, and the Barkey approach. SAMMEC is used to estimate excessive medical expenditures. We also used the Barkey

approach to validate the results obtained through SAMMEC. Table C-7 summarizes the data that are used to estimate the medical expenditures due to smoking.

Table C-7. Data Elements Used to Estimate Excessive Medical Expenditures.

Data Element	Data Source	Year	Methodology
Medical expenditures by type of care	National Health Expenditure Data	2004	SAMMEC
Estimates of state-wide medical costs attributable to smoking	Zhang et al. (1999)		Barkey
Consumer Price Index for medical care	Bureau of Labor Statistics		Barkey

Estimating the Impact of Increasing and Reducing Smoking Prevalence on Adult Medical Expenditures

To estimate the impact of smoking prevalence on adult medical expenditures, the team developed a model that predicts the smoking-attributable expenditures based on the percentage of population that has ever been a smoker. The analysis involved the following steps:

Step 1: Health expenditure data in 2004 were retrieved for National Health Expenditure Account for the 50 states and the District of Columbia. Using the smoking-attributable fractions provided by SAMMEC for each state, smoking-attributable medical expenditures were computed.

Step 2: Results of step 1 were standardized to adjust for population difference.

Step 3: Smoking prevalence data for each state in 2004 were retrieved from BRFSS. The 2004 data for Hawaii was not available. Prevalence in 2005 was used in the analysis.

Step 4: Separate OLS models were estimated for each type of care. Specifically, the following equation was estimated:

$$ME_i = \alpha + \beta P_i + \gamma P_i B_i + \varepsilon_i$$

Where:

ME is the population adjusted smoking-attributable medical expenditures in million dollars. Maryland was used as the reference state.

P is the percentage of current and former smokers.

B includes a block of dummy variables representing four census regions, and Alaska and Hawaii. Maryland was used as the reference state. Results of this step are presented in Table C-8

Step 5: Predicted values with the target prevalence, highest and lowest rate among state, and national median of the prevalence rate in 2004 were computed based on the models developed in step 4.

Table C-8. Estimates obtained through OLS regression on population adjust smoking-attributable medical expenditures

	Coefficient	Standard Error	P Value
Ambulatory			
% ever smoker	16.60	5.03	0.00
Ever smoker*North East	-2.44	2.75	0.38
Ever smoker*Mid West	-3.20	2.70	0.24
Ever smoker*South	-3.17	2.68	0.24
Ever smoker*West	-3.22	2.71	0.24

	Coefficient	Standard Error	P Value
Ever smoker*AK or HI	1.60	1.88	0.40
Constant	80.89	183.84	0.66
Adjusted R-squared	0.18		
Hospital			
% ever smoker	8.95	5.04	0.08
Ever smoker*North East	2.51	2.75	0.37
Ever smoker*Mid West	1.82	2.70	0.51
Ever smoker*South	0.89	2.68	0.74
Ever smoker*West	-0.24	2.71	0.93
Ever smoker*AK or HI	-0.05	1.89	0.98
Constant	67.05	184.03	0.72
Adjusted R-squared	0.22		
Prescription Drugs			
% ever smoker	7.41	1.57	0.00
Ever smoker*North East	0.10	0.86	0.91
Ever smoker*Mid West	-1.53	0.84	0.08
Ever smoker*South	-1.30	0.83	0.13
Ever smoker*West	-2.51	0.84	0.01
Ever smoker*AK or HI	-0.22	0.59	0.71
Constant	-21.53	57.26	0.71
Adjusted R-squared	0.70		
Nursing Homes			
% ever smoker	10.11	4.71	0.04
Ever smoker*North East	2.19	2.57	0.40
Ever smoker*Mid West	-1.00	2.53	0.69
Ever smoker*South	-4.36	2.51	0.09
Ever smoker*West	-6.97	2.53	0.01
Ever smoker*AK or HI	-2.86	1.76	0.11
Constant	171.05	172.09	0.33
Adjusted R-squared	0.72		
Other types of care			
% ever smoker	3.89	1.49	0.01
Ever smoker*North East	0.91	0.81	0.27
Ever smoker*Mid West	-0.35	0.80	0.66
Ever smoker*South	-0.50	0.79	0.53
Ever smoker*West	-0.31	0.80	0.70
Ever smoker*AK or HI	0.65	0.56	0.25
Constant	-98.49	54.39	0.08
Adjusted R-squared	0.46		
N	51		

Excessive Neonatal Medical Expenditures

The team used the SAMMEC to model the portion of neonatal medical expenditures that are attributable to smoking during pregnancy. The team collected and updated the model with 2004 Maryland in-patient records and the smoking prevalence among pregnant women between 2000 and 2004. Table C-9 summarizes the source of data to update maternal and child health portions of SAMMEC.

Table C-9. Data Elements for Updating SAMMEC Maternal and Child Health

Data Element	Data Source	Year
Maternal smoking prevalence	DHMH (2006)	2004
Neonatal medical expenditures by payment source	DHMH (2006)	2004

The neonatal expenditure data in SAMMEC is based on 1996 reimbursement rates. The program calculates a “smoking-attributable fraction” that is applied to total neonatal medical expenditures to determine the portion of expenditures related to smoking. For this portion of the analysis, the team used total hospital neonatal expenditures by payment source from 2004 to calculate the single year expenditures related to smoking.

In order to estimate the impact of reducing smoking prevalence, we also computed the neonatal expenditures using the target prevalence set forth by the Maryland Health Improvement Plan 2000-2010 (MDHMH, 2001).

Value of Lives Lost

SAMMEC was updated to obtain the potential years of life lost. Table C-10 presents the data that was collected and input into SAMMEC.

Table C-10. Data Elements Used to Estimate the Value of Lives Lost

Data Element	Data Source	Methodology
MD smoking prevalence in 2004	CDC/BRFSS	SAMMEC
Number of deaths by type of disease in 2004	DHMH (2006)	SAMMEC
Life expectancy	DHMH (2004)	SAMMEC

Although a large amount of literature has been written to put a monetary value on a statistical life, a consensus of the estimate is yet to emerge (Sloan et al., 2004). After surveying relevant literature, Sloan used a value of \$100,000 per life year lost, and stated that this was a conservative estimate (Sloan et al., 2004). We based our estimates on the same assumption.

Productivity Loss

There are two methods available to estimate this cost: SAMMEC, and the Barkey approach. We used the SAMMEC estimate productivity loss. The SAMMEC results were compared with the results from the Barkey approach to determine whether the SAMMEC results are reasonable. Table C-11 summarizes the data used to estimate the productivity loss.

Table C-11. Data Elements Used to Estimate Productivity Loss

Data Element	Data Source	Year	Methodology
Smoking prevalence	CDC/BRFSS	2004	SAMMEC
Number of deaths	DHMH (2006)	2004	SAMMEC
Maryland population, by gender, in 5-year age groups, i.e., 25-30 years, 30-35 years ... 70-75 years	Census Bureau	2004	Barkey
Incidence of adult (25 years and more) smoking by sex	CDC/BRFSS	2004	Barkey
Survival tables for smokers and nonsmokers (preferably relevant to Maryland)	Manning et al. (1999)		Barkey

Data Element	Data Source	Year	Methodology
Average earnings by age and sex for the most recent year available	American Community Survey	2005	Barkey

Validation of the SAMMEC Results

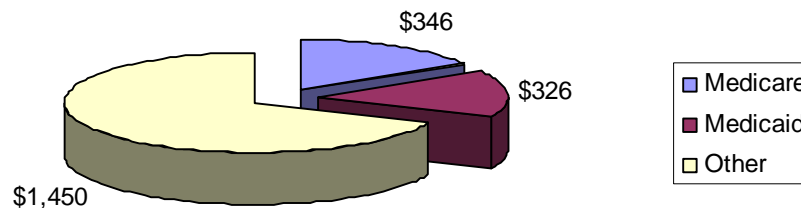
Adult Medical Expenditures

A. The Barkey Approach

In their work examining Medicare expenditures attributable to smoking, Zhang et al. (1999) provided estimates of excessive medical expenditures due to smoking by state and payment source. We updated their estimates to 2004 dollars using the Consumer Price Index for medical care. Results are presented in Figure C-1. As the figure indicates, the total annual smoking-attributable medical expenditures for Maryland were \$2,123 million. Medicare pays approximately 16% of the cost (\$346 million). Medicaid's share of the cost is approximately \$326 million or 15%. The remainder of the cost is paid by other public or private insurances and individuals.

This result is very close to the estimates by SAMMEC (\$2,199 million).

Figure C-1. Maryland smoking-attributable medical expenditures by source of payment (millions of dollars)



Total Excessive Medical Expenditures: \$2,123 million

NOTE: Estimates by Zhang et al. (1999). Adjusted to 2004 dollars using medical CPI (<http://data.bls.gov/PDQ/servlet/SurveyOutputServlet>).

B. Extrapolate non-SAMMEC calculations for California (Max et al., 2004) to Maryland to estimate MD smoking-attributable medical expenditures.

Max et al. (2004) applied an econometric model to estimating smoking-attributable medical cost of California in 1999. Although prevalence based, the study applied an econometric model that is different from the SAMMEC model. The authors concluded that the total annual medical cost attributable to California is approximately \$8.6 billion. The team extrapolated this result to Maryland by adjusting for the population and smoking prevalence differences between the two states. Further, the medical cost was updated to 2004 dollar using Consumer Price Index for medical care services.

Table C-12. Estimated Maryland annual smoking-attributable medical expenditures extrapolated from estimates of California

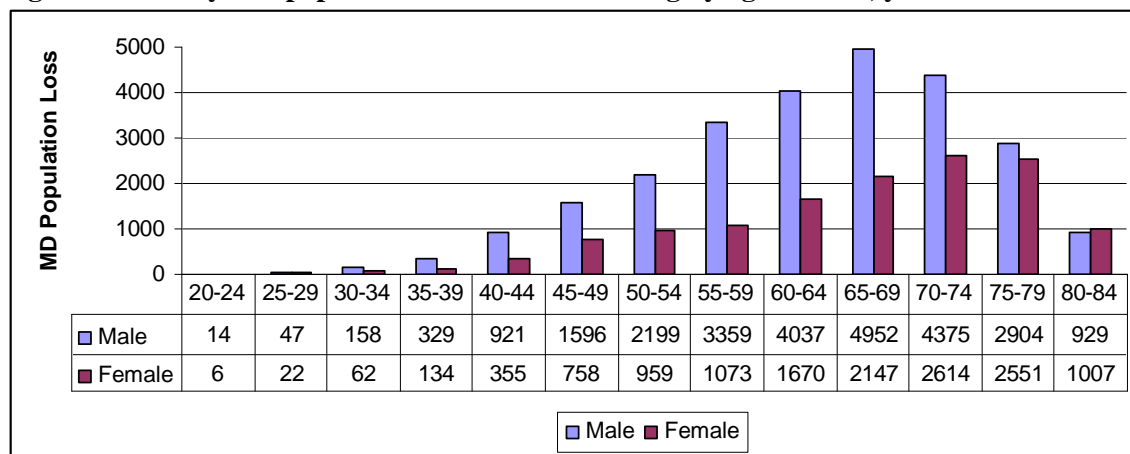
CA smoking-attributable medical expenditure in 1999	\$8,564,623,000
Ratio of MD and CA population (2000)	0.16
Ratio of MD and CA smoking prevalence	0.99
Inflation (CPI Medical Care Service) between 1999 and 2004	1.24
Estimated MD smoking-attributable medical expenditure	\$1.64 billion

Table B-1 presents the results of the extrapolation. The estimated annual smoking-attributable medical expenditures are \$1.64 billion. This is approximately 25% lower than the SAMMEC estimates. However, given the large differences between the two states that have not been accounted for, the differences of the two estimates are within reasonable range.

Productivity Loss

The Barkey approach is also used to compute the loss of productivity due to increased mortality as a result of smoking. Using survival tables for smokers and non-smokers, we computed Maryland's population loss from smoking based on smoking incidence and Maryland population by age and sex in 2004. Results are shown in Figure C-2. In year 2004, the Maryland male population between age 20 and 24 was 16 smaller than it would be if there were no smokers. The loss of population increases with age, and peaks at the age group between 65 and 69 years. A total of 25,821 males and 13,358 females deaths were attributable to smoking (see Table C-2). Note that these deaths may have occurred in multiple years. Their absence from the labor force causes a reduction in productivity.

Figure C-2. Maryland population losses from smoking by age and sex, year 2004



To translate smoking attributable deaths to annual loss of productivity, we multiplied the number of deaths in a given age group with the average wage and self-employment income of that age group in 2004 (columns 3 and 6 in Table C-13). Results are presented in columns four, seven, and eight of Table A-13. Smoking results in a \$1.1 billion loss in wages in Maryland annually, of which \$928 million is lost due to male smokers, and \$194 million is lost due to female smokers. Loss of productivity is far greater for males than females due to both a higher smoking prevalence among males, and higher average earnings among male workers.

Compared with the SAMMEC result (\$1.8 billion), the Barkey method generated lower estimates of productivity loss. However, the two estimates agree in that productivity loss is far greater among male smokers than female smokers.

Table C-13. Maryland smoking-attributable productivity loss by age and sex in year 2004 (Barkey approach)

Age Group	Male			Female			Total Smoking-Attributable Cost
	Population Loss	Average Income in 2004	Smoking-Attributable Cost	Population Loss	Average Income in 2004	Smoking-Attributable Cost	
20-24	14	\$17,221	\$238,837	6	\$14,168	\$88,465	\$327,302
25-29	47	\$35,530	\$1,673,063	22	\$27,092	\$583,465	\$2,256,528
30-34	158	\$48,770	\$7,693,135	62	\$31,371	\$1,947,674	\$9,640,809
35-39	329	\$57,532	\$18,923,797	134	\$35,575	\$4,753,645	\$23,677,441
40-44	921	\$61,587	\$56,752,052	355	\$34,571	\$12,280,088	\$69,032,140
45-49	1,596	\$64,921	\$103,621,473	758	\$37,217	\$28,222,886	\$131,844,359
50-54	2,199	\$64,279	\$141,359,465	959	\$38,477	\$36,898,896	\$178,258,361
55-59	3,359	\$64,011	\$215,019,860	1,073	\$32,876	\$35,271,920	\$250,291,780
60-64	4,037	\$51,375	\$207,392,390	1,670	\$24,271	\$40,539,378	\$247,931,768
65-69	4,952	\$21,783	\$107,871,750	2,147	\$8,560	\$18,380,550	\$126,252,300
70-74	4,375	\$10,776	\$47,149,236	2,614	\$3,908	\$10,214,745	\$57,363,982
75-79	2,904	\$6,114	\$17,751,102	2,551	\$1,620	\$4,132,023	\$21,883,124
80-84	929	\$2,888	\$2,683,613	1,007	\$713	\$718,312	\$3,401,925
Total	25,821		\$928,129,773	13,358		\$194,032,046	\$1,122,161,819

SOURCE: Average annual income computed from 2005 American Community Survey http://factfinder.census.gov/home/en/acs_pums_2005.html.

Appendix D: Jurisdiction-Level Cancer Program Tables

Table D-1. Type of Cancer Education and Screening Provided by Jurisdiction for All Program Years

Jurisdiction	Colorectal		Breast		Cervical		Prostate		Oral		Skin	
	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen
Allegany County	X	X	X		X						X	
Anne Arundel County	X	X	X	X	X	X	X		X		X	
Baltimore City	X		X	X	X	X	X	X	X	X	X	
Baltimore County	X	X	X	X	X	X	X	X	X	X	X	X
Calvert County	X	X										
Caroline County	X	X									X	
Carroll County	X	X					X				X	
Cecil County	X	X										
Charles County	X	X										
Dorchester County	X	X		X		X						
Frederick County	X	X					X				X	
Garrett County	X	X	X		X		X	X	X	X	X	X
Harford County	X	X	X		X		X		X		X	
Howard County	X	X	X		X		X				X	
Kent County	X	X					X				X	
Montgomery County	X	X	X		X		X	X	X	X	X	
Prince George's County	X	X					X					
Queen Anne's County	X	X									X	
St. Mary's County	X	X										
Somerset County	X	X	X		X				X		X	
Talbot County	X	X	X	X	X	X	X	X			X	
Washington County	X	X	X		X			X	X		X	
Wicomico County	X	X									X	
Worcester County	X	X	X		X		X		X	X	X	X
Maryland	24	23	12	5	12	5	13	6	9	5	18	3

Source: DHMH Cancer Education and Cancer Screening Databases, November 2006

Table D-2. General Population Attendance for Cancer Education and Number of Screenings for All Targeted cancers, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006*		Total	
	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen	Educate	Screen
Allegany	842	26	3,158	99	2,378	134	1,025	89	1,695	91	1,522	56	10,620	495
Anne Arundel	20	19	5,966	160	4,321	395	2,569	586	5,144	435	7,542	0	25,562	1,595
Baltimore City	200	101	1,218	2,743	19,911	3,250	24,040	3,830	22,853	2,988	14,246	1,021	82,468	13,933
Baltimore	1,371	7	2,387	109	12,225	440	4,073	406	6,766	408	6,233	357	33,055	1,727
Calvert	320	99	3,372	172	2,115	146	2,826	95	993	46	2,135	66	11,761	624
Caroline	143	13	387	43	397	51	797	45	2,638	69	2,653	63	7,015	284
Carroll	1,058	112	4,664	540	7,692	669	5,733	567	8,923	395	8,887	164	36,957	2,447
Cecil	528	0	1,611	31	2,850	93	6,434	78	3,744	84	2,364	82	17,531	368
Charles	550	51	1,432	104	1,663	95	2,364	44	3,240	47	3,706	46	12,955	387
Dorchester	796	0	1,402	37	1,938	73	327	150	311	190	2,561	135	7,335	585
Frederick	1,360	18	3,876	117	1,899	108	4,354	97	4,790	105	4,957	93	21,236	538
Garrett	1,188	62	8,024	956	2,543	1,080	2,205	1,173	2,361	1,112	1,799	660	18,120	5,043
Harford	30	1	2,948	33	3,234	94	5,749	63	6,292	65	2,037	57	20,290	313
Howard	2	14	1,380	150	3,152	91	5,154	78	4,511	86	4,447	84	18,646	503
Kent	61	25	784	82	1,206	132	862	130	1,775	108	1,134	64	5,822	541
Montgomery	521	29	5,402	1,562	5,036	1,926	9,813	1,002	11,969	808	30,842	607	63,583	5,934
Prince George's	26	0	4,245	632	6,683	589	9,177	371	5,283	290	5,153	82	30,567	1,964
Queen Anne's	61	1	491	46	1,979	30	4,354	35	4,267	47	5,434	49	16,586	208
St. Mary's	2,562	272	3,990	220	1,685	180	1,825	152	3,371	74	2,979	51	16,412	949
Somerset	683	9	378	26	1,048	37	640	27	723	19	2,913	22	6,385	140
Talbot	597	2	433	37	6,604	63	1,727	97	2,291	94	952	71	12,604	364
Washington	666	3	4,347	146	4,831	134	3,959	92	3,130	110	2,889	83	19,822	568
Wicomico	1,194	99	1,688	124	5,085	93	9,798	102	3,782	95	4,585	81	26,132	594
Worcester	575	66	753	133	1,410	147	1,656	67	1,755	55	4,348	38	10,497	506
Maryland	15,354	1,029	64,336	8,302	101,885	10,050	111,461	9,376	112,607	7,821	126,318	6,276	531,961	42,854

* = Jurisdiction level counts for breast and cervical cancer screenings were not available. The State total for 2006 includes breast and cervical screenings, so the cells do not add up

Note: Education figures include education for colorectal, breast and cervical, prostate, skin, oral, and general or other cancers

Source: DHMH Cancer Education and Cancer Screening Databases, November 2006; DHMH Breast and Cervical Cancer Screening Database, April 2006

Table D-3. Number of General Population Educated About Colorectal Cancer, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Allegany County	842	3,158	2,378	1,025	1,627	1,148	10,178
Anne Arundel County	0	5,966	4,170	45	0	0	10,181
Baltimore City	0	44	0	14	0	0	58
Baltimore County	1,371	2,355	8,341	1,416	1,091	945	15,519
Calvert County	320	3,372	2,115	2,826	993	2,135	11,761
Caroline County	143	387	397	705	1,588	1,283	4,503
Carroll County	1,058	4,664	7,692	5,733	3,177	868	23,192
Cecil County	528	1,611	2,850	6,434	3,744	2,364	17,531
Charles County	550	1,432	1,663	2,364	3,240	3,706	12,955
Dorchester County	796	1,402	1,938	327	311	2,561	7,335
Frederick County	1,321	3,851	1,543	2,238	1,695	1,332	11,980
Garrett County	0	135	556	132	0	27	850
Harford County	30	1,948	2,443	2,130	2,113	524	9,188
Howard County	0	1,336	1,211	2,757	2,684	1,975	9,963
Kent County	61	784	1,206	862	1,593	987	5,493
Montgomery County	521	5,034	4,589	4,242	3,704	9,075	27,165
Prince George's County	26	4,245	6,683	9,177	5,283	4,403	29,817
Queen Anne's County	61	491	959	1,257	1,886	1,699	6,353
Somerset County	183	377	894	293	278	1,912	3,937
St. Mary's County	2,537	3,927	1,685	1,825	2,981	2,979	15,934
Talbot County	597	413	999	332	115	90	2,546
Washington County	666	3,599	2,257	2,221	382	105	9,230
Wicomico County	1,194	1,688	2,882	1,435	796	295	8,290
Worcester County	181	753	527	158	74	208	1,901
Maryland	12,986	52,972	59,978	49,948	39,355	40,621	255,860

Source: DHMH Cancer Education Database, November 2006

Table D-4. Number of FOBTs Performed (by Fiscal Year) and Number of Positive Screens, by Jurisdiction

Jurisdiction	Number of FOBTs Performed							Number of Positive Screens
	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total	
Allegany County	16	16	5	3	5	0	45	7
Calvert County	93	131	91	45	1	0	361	15
Caroline County	10	14	0	0	0	0	24	2
Carroll County	110	527	647	531	353	120	2,288	222
Cecil County	0	14	24	22	25	24	109	16
Charles County	42	85	50	0	0	0	177	14
Garrett County	14	209	249	247	222	76	1,017	30
Harford County	1	7	0	0	0	1	9	0
Howard County	13	114	9	0	3	0	139	6
Kent County	21	75	108	112	84	36	436	12
Montgomery County	29	995	366	0	0	0	1,390	83
Prince George's County	0	587	412	170	69	19	1,257	140
Queen Anne's County	1	10	1	0	0	0	12	3
St. Mary's County	259	176	130	97	0	1	663	49
Somerset County	5	9	6	1	0	0	21	7
Talbot County	1	1	0	0	0	0	2	0
Washington County	3	51	16	2	0	1	73	7
Wicomico County	56	64	14	16	15	8	173	10
Maryland	674	3,085	2,128	1,246	777	286	8,196	623

Source: DHMH Cancer Screening Database, November 2006

Table D-5. Number of Sigmoidoscopies Performed (by Fiscal Year) and Number of Positive Outcomes for Polyps, by Jurisdiction

Jurisdiction	Number of Sigmoidoscopies Performed							Number Positive for Polyps
	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total	
Allegany County	5	4	2	1	3	2	17	5
Anne Arundel County	0	0	1	0	0	0	1	0
Baltimore County	0	0	2	1	1	0	4	1
Calvert County	0	1	0	0	0	0	1	0
Carroll County	0	1	1	0	1	0	3	0
Cecil County	0	0	0	1	2	0	3	1
Charles County	0	2	0	2	0	1	5	1
Dorchester County	0	0	0	0	1	0	1	0
Harford County	0	1	1	0	0	0	2	1
Howard County	0	13	0	0	0	0	13	2
Montgomery County	0	10	1	1	0	0	12	0
Prince George's County	0	0	0	0	1	0	1	0
Queen Anne's County	0	0	0	0	1	1	2	0
St. Mary's County	0	2	1	0	0	2	5	2
Somerset County	2	4	0	0	0	0	6	0
Talbot County	0	0	0	0	0	1	1	1
Washington County	0	1	2	0	1	1	5	2
Wicomico County	20	28	1	0	0	0	49	6
Worcester County	0	0	0	0	2	0	2	1
Maryland	27	67	12	6	13	8	133	23

Source: DHMH Cancer Screening Database, November 2006

Table D-6. Number of Colonoscopies Performed (by Fiscal Year) and Number of Positive Outcomes for Adenomas, by Jurisdiction

Jurisdiction	Number of Colonoscopies Performed							Number Positive for Adenomas
	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total	
Allegany County	5	79	127	85	83	54	433	89
Anne Arundel County	19	160	143	20	0	0	342	107
Baltimore City	0	0	0	0	0	1	1	0
Baltimore County	7	109	306	224	259	251	1,156	222
Calvert County	6	40	55	50	45	66	262	62
Caroline County	3	29	51	45	69	63	260	88
Carroll County	2	12	21	36	41	44	156	28
Cecil County	0	17	69	55	57	58	256	77
Charles County	9	17	45	42	47	45	205	30
Dorchester County	0	37	46	55	68	135	341	102
Frederick County	18	117	108	97	105	93	538	102
Garrett County	11	89	78	78	70	83	409	87
Harford County	0	25	93	63	65	56	302	46
Howard County	1	23	82	78	83	84	351	66
Kent County	4	7	24	18	24	28	105	14
Montgomery County	0	213	440	236	272	225	1,386	210
Prince George's County	0	45	177	201	220	63	706	143
Queen Anne's County	0	36	29	35	46	48	194	50
St. Mary's County	13	42	49	55	74	48	281	75
Somerset County	2	13	31	26	19	22	113	19
Talbot County	1	36	29	53	44	50	213	59
Washington County	0	94	116	81	93	62	446	118
Wicomico County	23	32	78	86	80	73	372	111
Worcester County	10	41	59	55	49	38	252	40
Maryland	134	1,313	2,256	1,774	1,913	1,690	9,080	1,945

Source: DHMH Cancer Screening Database, November 2006

Table D-7. Number of General Population Educated About Breast/Cervical Cancer, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Allegany County	0	0	0	0	39	374	413
Anne Arundel County	20	0	1	1,578	2,483	883	4,965
Baltimore City	200	339	2,671	8,089	7,980	7,856	27,135
Baltimore County	0	32	995	105	475	204	1,811
Garrett County	178	580	355	823	46	227	2,209
Harford County	0	0	366	1,772	2,617	1,098	5,853
Howard County	0	29	0	1,309	361	800	2,499
Montgomery County	0	0	0	640	1,708	6,118	8,466
Somerset County	0	0	0	0	127	0	127
Talbot County	0	6	56	118	211	38	429
Washington County	0	0	0	0	214	128	342
Worcester County	0	0	232	50	0	130	412
Maryland	398	986	4,676	14,484	16,261	17,856	54,661

Source: DHMH Cancer Education Database, November 2006

Table D-8. Number of Breast Cancer Screenings, by Type of Screening, Jurisdiction and Fiscal Year

Type of Screening and Jurisdiction							
CBE	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Anne Arundel County	0	0	85	197	170	—	452
Baltimore City	33	781	743	762	631	—	2,950
Baltimore County	0	0	34	27	5	—	66
Dorchester County	0	0	11	42	50	—	103
Talbot County	0	0	17	22	16	—	55
Mammogram							
Anne Arundel County	0	0	85	191	144	—	420
Baltimore City	38	644	601	740	668	—	2,691
Baltimore County	0	0	31	16	6	—	53
Dorchester County	0	0	11	40	51	—	102
Talbot County	0	0	0	1	2	—	3
Maryland	71	1,425	1,618	2,038	1,743	1,282	8,177

— = Data was unavailable

Source: DHMH Breast and Cervical Cancer Screening Database, April 2006

Table D-9. Number of Pap Exams, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Anne Arundel County	0	0	81	178	121	—	380
Baltimore City	26	658	589	554	383	—	2,210
Baltimore County	0	0	20	5	4	—	29
Dorchester County	0	0	5	13	20	—	38
Talbot County	0	0	17	21	16	—	54
Maryland	26	658	712	771	544	962	3,673

— = Data was not available

Source: DHMH Breast and Cervical Cancer Screening Database, April 2006

Table D-10. Number of General Population Educated About Prostate Cancer, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Anne Arundel County	0	0	0	104	0	0	104
Baltimore City	0	203	13,890	12,440	14,289	5,832	46,654
Baltimore County	0	0	108	3	19	15	145
Carroll County	0	0	0	0	1,465	622	2,087
Frederick County	0	0	0	0	0	6	6
Garrett County	22	65	78	0	0	0	165
Harford County	0	0	72	615	704	150	1,541
Howard County	2	15	212	268	507	472	1,476
Kent County	0	0	0	0	112	62	174
Montgomery County	0	0	10	1,010	768	1,688	3,476
Prince George's County	0	0	0	0	0	750	750
Talbot County	0	7	241	115	36	18	417
Worcester County	42	0	0	0	0	0	42
Maryland	66	290	14,611	14,555	17,900	9,615	57,037

Source: DHMH Cancer Education Database, November 2006

Table D-11. Number of Prostate Cancer Screenings, by Type of Screening, Jurisdiction and Fiscal Year

Type of Screening and Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
DRE							
Baltimore City	2	314	230	561	635	443	2,185
Baltimore County	0	0	0	12	14	14	40
Garrett County	3	12	10	7	13	14	59
Montgomery County	0	0	0	118	74	78	270
Talbot County	0	0	0	0	8	10	18
Washington County	0	0	0	4	8	9	21
PSA							
Baltimore City	2	331	251	595	670	577	2,426
Baltimore County	0	0	0	12	17	14	43
Garrett County	4	23	18	17	17	14	93
Montgomery County	0	0	0	123	85	82	290
Talbot County	0	0	0	0	8	10	18
Washington County	0	0	0	5	8	10	23
Maryland	11	680	509	1,454	1,557	1,275	5,486

Source: DHMH Cancer Screening Database, November 2007

Table D-12. Number of General Population Educated About Oral Cancer, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Anne Arundel County	0	0	0	30	0	155	185
Baltimore City	0	351	0	0	0	0	351
Baltimore County	0	0	559	34	21	71	685
Garrett County	65	355	186	136	667	35	1,444
Harford County	0	0	0	119	124	3	246
Montgomery County	0	47	402	2,047	1,570	1,191	5,257
Somerset County	0	0	0	29	112	0	141
Washington County	0	0	0	15	101	12	128
Worcester County	0	0	0	38	86	2,427	2,551
Maryland	65	753	1,147	2,448	2,681	3,894	10,988

Source: DHMH Cancer Education Database, November 2006

Table D-13. Number of Oral Cancer Screenings, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total	Brush Biopsies
Baltimore City	0	15	836	618	1	0	1,470	17
Baltimore County	0	0	46	63	50	41	200	13
Garrett County	15	309	362	411	393	233	1,723	1
Montgomery County	0	344	1,119	524	377	222	2,586	155
Worcester County	28	46	44	6	2	0	126	0
Maryland	43	714	2,407	1,622	823	496	6,105	186

Source: DHMH Cancer Screening Database, November 2007

Table D-14. Number of General Population Educated About Skin Cancer, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Allegany County	0	0	0	0	29	0	29
Anne Arundel County	0	0	0	0	40	126	166
Baltimore City	0	0	32	27	0	0	59
Baltimore County	0	0	583	3	435	310	1,331
Caroline County	0	0	0	92	1,050	1,370	2,512
Carroll County	0	0	0	0	4,281	6,756	11,037
Frederick County	0	25	14	633	1,916	1,791	4,379
Garrett County	47	6,352	695	425	936	408	8,863
Harford County	0	1,000	87	1,095	726	89	2,997
Howard County	0	0	41	591	594	1,041	2,267
Kent County	0	0	0	0	70	0	70
Montgomery County	0	0	0	262	572	1,630	2,464
Queen Anne's County	0	0	870	3,097	2,381	3,735	10,083
Somerset County	0	0	0	0	206	25	231
Talbot County	0	7	5,308	1,162	1,904	766	9,147
Washington County	0	0	345	1,228	1,051	1,113	3,737
Wicomico County	0	0	2,118	8,363	2,942	3,810	17,233
Worcester County	0	0	651	350	135	699	1,835
Maryland	47	7,384	10,744	17,328	19,268	23,669	78,440

Source: DHMH Cancer Education Database, November 2006

Table D-15. Number of Skin Cancer Screenings, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Baltimore County	0	0	1	46	52	37	136
Garrett County	15	314	363	413	397	240	1,742
Worcester County	28	46	44	6	2	0	126
Maryland	43	360	408	465	451	277	2,004

Source: DHMH Cancer Screening Database, November 2007

Table D-16. Number and Percentage of Minority Individuals Educated Through CPEST Programs, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Total %	Census
Allegany	195	23.2%	210	6.6%	158	6.6%	76	7.4%	189	11.2%	379	24.9%	11.4%	7.0%
Anne Arundel	0	0.0%	1,023	17.1%	850	19.7%	1,372	53.4%	4,873	94.7%	3,338	44.3%	44.8%	18.8%
Baltimore City	0	0.0%	1,146	94.1%	16,702	83.9%	21,295	88.6%	18,405	80.5%	12,313	86.4%	84.7%	68.4%
Baltimore	41	3.0%	1,263	52.9%	3,879	31.7%	1,383	34.0%	2,725	40.3%	2,812	45.1%	36.6%	29.6%
Calvert	146	45.6%	1,019	30.2%	915	43.3%	1,311	46.4%	560	56.4%	628	29.4%	38.9%	16.0%
Caroline	51	35.7%	148	38.2%	156	39.3%	368	46.2%	791	30.0%	1,183	44.6%	38.4%	18.3%
Carroll	159	15.0%	261	5.6%	767	10.0%	788	13.7%	679	7.6%	679	7.6%	9.0%	4.3%
Cecil	118	22.3%	335	20.8%	665	23.3%	1,265	19.7%	1,289	34.4%	588	24.9%	24.3%	6.6%
Charles	369	67.1%	921	64.3%	782	47.0%	1,509	63.8%	1,161	35.8%	1,730	46.7%	50.0%	31.5%
Dorchester	450	56.5%	1,203	85.8%	1,275	65.8%	118	36.1%	241	77.5%	840	32.8%	56.3%	30.6%
Frederick	169	12.4%	1,854	47.8%	1,227	64.6%	1,595	36.6%	2,000	41.8%	2,255	45.5%	42.9%	10.7%
Garrett	10	0.8%	89	1.1%	6	0.2%	278	12.6%	48	2.0%	19	1.1%	2.5%	1.2%
Harford	0	0.0%	923	31.3%	1,552	48.0%	2,170	37.7%	2,111	33.6%	739	36.3%	36.9%	13.2%
Howard	2	100.0%	453	32.8%	1,493	47.4%	2,795	54.2%	2,308	51.2%	2,025	45.5%	48.7%	28.3%
Kent	8	13.1%	544	69.4%	820	68.0%	586	68.0%	1,053	59.3%	685	60.4%	63.5%	20.4%
Montgomery	241	46.3%	3,873	71.7%	3,685	73.2%	6,988	71.2%	7,794	65.1%	23,037	74.7%	71.7%	34.3%
Prince George's	26	100.0%	3,033	71.4%	3,841	57.5%	6,170	67.2%	4,927	93.3%	4,454	86.4%	73.4%	75.4%
Queen Anne's	12	19.7%	128	26.1%	317	16.0%	355	8.2%	1,301	30.5%	1,245	22.9%	20.2%	11.0%
St. Mary's	224	8.7%	194	4.9%	757	44.9%	300	16.4%	1,270	37.7%	643	21.6%	20.6%	18.4%
Somerset	1,192	174.5%	1,619	428.3%	257	24.5%	535	83.6%	1,072	148.3%	679	23.3%	83.9%	43.6%
Talbot	330	55.3%	92	21.2%	1,463	22.2%	594	34.4%	772	33.7%	231	24.3%	27.6%	18.0%
Washington	6	0.9%	554	12.7%	1,012	20.9%	959	24.2%	876	28.0%	819	28.3%	21.3%	10.3%
Wicomico	829	69.4%	968	57.3%	2,386	46.9%	3,317	33.9%	1,286	34.0%	1,779	38.8%	40.4%	27.4%
Worcester	179	31.1%	695	92.3%	358	25.4%	745	45.0%	450	25.6%	1,077	24.8%	33.4%	18.8%
Maryland	4,757	31.0%	22,548	35.0%	45,323	44.5%	56,872	51.0%	58,181	51.7%	64,177	50.8%	47.3%	34.6%

Source: DHMH Cancer Education Database, November 2006 ; US Census, 2000

Table D-17. Number and Percentage of Screenings Provided to Minority Individuals through CPEST Programs, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Total %	Census
Allegany	5	19.2%	2	2.1%	65	48.5%	6	6.7%	1	1.1%	4	7.1%	15.8%	7.0%
Anne Arundel	0	0.0%	66	40.0%	60	19.4%	198	49.0%	137	46.4%	0	0.0%	38.8%	18.8%
Baltimore City	53	77.9%	1,953	91.2%	2,496	92.2%	2,690	85.8%	2,242	94.4%	982	96.2%	90.4%	68.4%
Baltimore	2	28.6%	48	44.0%	211	52.6%	189	48.2%	177	44.4%	150	42.0%	46.5%	29.6%
Calvert	6	6.1%	30	17.4%	34	23.3%	25	26.0%	17	37.0%	28	42.4%	21.5%	16.0%
Caroline	4	30.8%	12	27.9%	10	19.2%	20	44.4%	19	27.5%	26	41.3%	30.6%	18.3%
Carroll	8	7.1%	45	8.3%	38	5.7%	45	7.9%	40	10.1%	20	12.2%	7.7%	4.3%
Cecil	0	0.0%	2	6.5%	7	7.5%	13	16.7%	22	26.5%	14	17.1%	15.8%	6.6%
Charles	35	68.6%	58	55.8%	45	47.4%	29	65.9%	33	70.2%	24	52.2%	48.8%	31.5%
Dorchester	0	0.0%	17	47.2%	29	46.8%	59	53.6%	72	51.4%	64	47.4%	49.8%	30.6%
Frederick	9	50.0%	63	53.8%	51	47.2%	57	57.6%	63	60.6%	54	58.1%	53.5%	10.7%
Garrett	1	1.6%	5	0.5%	9	0.8%	13	1.1%	13	1.2%	6	0.9%	0.9%	1.2%
Harford	0	0.0%	7	21.2%	23	24.5%	15	23.8%	13	20.0%	15	26.3%	23.3%	13.2%
Howard	6	46.2%	60	44.4%	68	74.7%	68	86.1%	69	80.2%	67	79.8%	66.0%	28.3%
Kent	6	24.0%	41	49.4%	50	37.9%	51	39.2%	43	39.8%	28	43.8%	39.4%	20.4%
Montgomery	5	17.2%	1,125	71.5%	1,415	70.2%	888	86.0%	738	88.5%	568	93.6%	77.7%	34.3%
Prince George's	0	0.0%	578	92.0%	561	96.2%	359	97.3%	256	88.6%	79	96.3%	93.3%	75.4%
Queen Anne's	1	100.0%	17	37.0%	9	30.0%	10	28.6%	16	34.0%	12	24.5%	30.8%	11.0%
St. Mary's	198	72.3%	107	47.8%	54	29.5%	35	23.0%	31	41.9%	23	45.1%	26.3%	18.4%
Somerset	5	55.6%	8	30.8%	17	48.6%	12	44.4%	8	42.1%	11	50.0%	40.0%	43.6%
Talbot	1	50.0%	26	70.3%	34	54.8%	53	55.2%	59	65.6%	36	50.7%	57.6%	18.0%
Washington	0	0.0%	10	6.9%	9	6.7%	12	13.2%	19	17.3%	11	13.3%	10.7%	10.3%
Wicomico	53	53.5%	65	52.0%	57	61.3%	50	49.0%	55	57.9%	53	65.4%	47.1%	27.4%
Worcester	22	33.3%	53	44.2%	55	44.0%	26	39.4%	24	43.6%	14	36.8%	34.0%	18.8%
Maryland	420	42.2%	4,398	57.2%	5,407	57.3%	4,923	58.1%	4,167	59.3%	2,289	56.8%	53.0%	34.6%

Note: The percentages in 2006 do not include breast and cervical cancer screening data

Source: DHMH Cancer Screening Database, November 2006 and DHMH Breast and Cervical Cancer Database, April 2006; US Census, 2000

Table D-18. Number and Percent of African American Individuals Receiving Colorectal Cancer Screenings by Fiscal Year, and 2000 Census

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	%	Census
Allegany	0	0.0%	1	1.2%	0	0.0%	5	5.7%	1	1.1%	4	7.1%	2.4%	5.3%
Anne Arundel	4	21.1%	44	28.2%	30	21.3%	5	25.0%	—	—	—	—	24.7%	13.6%
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	64.3%
Baltimore Co.	2	28.6%	40	38.8%	97	33.1%	73	33.5%	73	29.3%	76	30.8%	32.3%	23.2%
Calvert	5	10.0%	25	18.0%	28	23.9%	18	21.7%	16	36.4%	28	43.1%	24.1%	12.5%
Caroline	4	36.4%	8	25.8%	9	18.0%	19	42.2%	16	23.9%	23	36.5%	29.6%	14.8%
Carroll	3	2.8%	29	5.6%	20	3.1%	19	3.6%	17	4.8%	12	8.0%	4.3%	2.3%
Cecil	—	—	1	3.6%	4	5.1%	5	8.5%	5	7.6%	4	6.3%	6.4%	3.9%
Charles	30	62.5%	52	54.7%	38	41.8%	26	63.4%	30	63.8%	21	47.7%	53.8%	26.1%
Dorchester	—	—	16	44.4%	18	41.9%	29	51.8%	23	33.8%	58	43.9%	43.0%	28.4%
Frederick	3	27.3%	22	26.5%	11	11.0%	16	22.9%	18	28.6%	12	22.2%	21.5%	6.4%
Garrett	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.4%
Harford	0	0.0%	7	21.9%	18	19.8%	14	22.6%	8	12.5%	13	22.4%	19.5%	9.3%
Howard	3	21.4%	20	19.8%	22	24.7%	19	26.4%	22	26.8%	23	28.8%	24.9%	15.8%
Kent	6	25.0%	35	44.9%	39	32.2%	40	32.8%	33	32.0%	20	34.5%	34.2%	17.4%
Montgomery	4	19.0%	139	21.9%	129	19.0%	39	17.0%	54	24.4%	63	36.4%	21.8%	14.9%
Prince George's	—	—	142	43.7%	114	35.2%	82	42.5%	159	61.6%	55	72.4%	46.9%	65.7%
Queen Anne's	1	100.0%	15	39.5%	8	26.7%	9	26.5%	14	30.4%	11	23.9%	29.7%	8.8%
St. Mary's	4	57.1%	5	26.3%	14	42.4%	12	44.4%	8	47.1%	11	50.0%	43.2%	13.9%
Somerset	187	73.6%	84	44.0%	42	26.3%	29	20.1%	20	29.0%	18	40.0%	44.0%	41.1%
Talbot	1	50.0%	23	63.9%	16	57.1%	17	34.7%	24	54.5%	18	37.5%	47.8%	15.4%
Washington	—	0.0%	8	5.9%	6	4.7%	4	4.7%	9	10.1%	6	9.4%	6.5%	7.8%
Wicomico	25	44.6%	36	45.6%	42	46.7%	45	44.6%	49	51.6%	39	50.6%	47.4%	23.3%
Worcester	4	40.0%	19	46.3%	27	43.5%	21	39.6%	23	47.9%	14	36.8%	42.9%	16.7%
Maryland	286	41.4%	771	23.7%	732	19.2%	546	20.3%	622	25.4%	529	29.3%	23.7%	27.9%

— = Did not provide any screenings

Source: DHMH Cancer Screening Database, March 2007; US Census, 2000

Table D-19. Number and Percent of Hispanic/Latino Individuals Receiving Colorectal Cancer Screenings by Fiscal Year, and 2000 Census

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	%	Census
Allegany	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.8%
Anne Arundel	0	0.0%	11	6.9%	15	10.7%	2	10.0%	—	—	—	—	8.3%	2.6%
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	1.7%
Baltimore Co.	0	0.0%	2	3.7%	15	5.4%	16	8.4%	21	8.5%	17	6.9%	7.0%	2.3%
Calvert	0	0.0%	0	0.0%	5	5.0%	1	1.3%	3	7.7%	0	0.0%	2.0%	1.9%
Caroline	0	0.0%	1	3.1%	0	0.0%	2	4.7%	2	3.0%	1	1.6%	2.4%	2.7%
Carroll	0	0.0%	8	1.8%	7	1.1%	12	2.3%	6	1.8%	4	2.9%	1.7%	1.0%
Cecil	0	—	0	0.0%	1	1.3%	2	3.3%	2	3.0%	1	1.6%	2.1%	1.5%
Charles	3	6.1%	1	1.0%	2	2.2%	1	2.4%	1	2.1%	1	2.2%	2.4%	2.3%
Dorchester	—	—	3	12.5%	0	0.0%	0	0.0%	4	6.0%	5	3.8%	3.9%	1.3%
Frederick	6	35.3%	40	33.9%	33	30.6%	35	36.8%	41	39.8%	36	40.0%	36.0%	2.4%
Garrett	1	4.0%	0	0.0%	1	0.3%	1	0.3%	1	0.4%	0	0.0%	0.3%	0.4%
Harford	0	0.0%	0	0.0%	3	3.3%		0.0%	1	1.6%	1	1.7%	1.6%	1.9%
Howard	1	7.1%	5	5.4%	8	9.4%	8	10.8%	12	14.6%	19	25.3%	12.6%	3.8%
Kent	0	0.0%		0.0%	2	2.2%	4	4.0%	2	2.3%	1	2.0%	2.2%	2.8%
Montgomery	0	0.0%	502	52.6%	331	45.7%	120	51.3%	130	48.1%	83	37.2%	48.0%	13.3%
Prince George's	—	—	279	51.9%	277	50.5%	192	55.7%	94	35.3%	17	23.6%	48.5%	9.9%
Queen Anne's	0	0.0%	0	0.0%	0	0.0%	1	3.0%	2	4.8%		0.0%	1.7%	1.1%
St. Mary's	0	0.0%	1	5.9%	1	3.2%	0	0.0%	0	0.0%	0	0.0%	1.7%	2.0%
Somerset	2	2.1%	8	7.2%	4	3.5%	2	1.7%	4	5.6%	1	2.1%	3.8%	1.3%
Talbot	0	0.0%	1	3.0%	2	7.1%	7	13.2%		0.0%	4	8.0%	6.6%	1.8%
Washington	0	0.0%		0.0%	1	0.8%	3	3.5%	3	3.3%	2	3.1%	1.8%	1.2%
Wicomico	3	5.3%	3	3.7%	10	10.9%	3	3.0%	6	6.3%	9	11.4%	6.7%	2.2%
Worcester	0	0.0%	0	0.0%	0	0.0%	2	3.7%	0	0.0%	1	2.6%	1.2%	1.3%
Maryland	16	3.0%	865	24.5%	718	18.2%	414	14.9%	335	13.4%	203	10.9%	16.8%	4.3%

— = Did not provide any screenings

Source: DHMH Cancer Screening Database, March 2007; US Census, 2000

Table D- 20. Number and Percent of Asian American Individuals Receiving Colorectal Cancer Screenings by Fiscal Year, and 2000 Census

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	%	Census
Allegany	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.5%
Anne Arundel	1	5.3%	7	4.5%	19	13.5%	1	5.0%	—	—	—	—	8.3%	2.3%
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5%
Baltimore Co.	0	0.0%	3	2.9%	26	8.9%	18	8.3%	30	12.0%	19	7.7%	8.6%	3.9%
Calvert	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%		0.0%	0.0%	0.8%
Caroline	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.5%	1	1.6%	0.7%	0.5%
Carroll	2	1.9%	4	0.8%	5	0.8%	8	1.5%	6	1.7%	1	0.7%	1.1%	0.8%
Cecil	—	—	0	0.0%	0	0.0%	0	0.0%	1	1.5%		0.0%	0.3%	0.7%
Charles	2	4.2%	2	2.1%	3	3.3%	0	0.0%	0	0.0%		0.0%	1.9%	1.8%
Dorchester	—	—	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.8%	0.3%	0.7%
Frederick	0	0.0%	0	0.0%	2	2.0%	2	2.9%	3	4.8%	5	9.3%	3.1%	1.7%
Garrett	0	0.0%	0	0.0%	1	0.3%	1	0.3%	0	0.0%		0.0%	0.2%	0.2%
Harford	0	0.0%	0	0.0%	1	1.1%	0	0.0%	3	4.7%		0.0%	1.3%	1.5%
Howard	2	14.3%	16	15.8%	36	40.4%	38	52.8%	32	39.0%	24	30.0%	33.8%	10.2%
Kent	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.0%		0.0%	0.2%	0.5%
Montgomery	1	4.8%	107	16.8%	106	15.6%	65	28.4%	73	33.0%	66	38.2%	21.3%	13.3%
Prince George's	—	—	147	45.2%	148	45.7%	73	37.8%	9	3.5%	4	5.3%	32.4%	4.0%
Queen Anne's	0	0.0%	0	0.0%	1	3.3%	0	0.0%	0	0.0%		0.0%	0.5%	0.6%
St. Mary's	0	0.0%	0	0.0%	1	3.0%	0	0.0%	0	0.0%		0.0%	0.8%	1.8%
Somerset	1	0.4%	1	0.5%	1	0.6%	2	1.4%	1	1.4%	2	4.4%	0.9%	0.5%
Talbot	0	0.0%	0	0.0%	1	3.6%	1	2.0%	0	0.0%	2	4.2%	1.9%	0.8%
Washington	0	0.0%	0	0.0%	1	0.8%	0	0.0%	2	2.2%		0.0%	0.6%	0.8%
Wicomico	1	1.8%	2	2.5%	5	5.6%	1	1.0%	2	2.1%	3	3.9%	2.8%	1.7%
Worcester	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%		0.0%	0.0%	0.6%
Maryland	10	1.4%	289	8.9%	357	9.4%	210	7.8%	164	6.7%	128	7.1%	7.9%	4.0%
— = Did not provide any screenings														
Source: DHMH Cancer Screening Database, March 2007; US Census, 2000														

Table D-21. Number and Percent of Native American Individuals Receiving Colorectal Cancer Screenings by Fiscal Year, and 2000 Census

Jurisdiction	FY2001		FY2002		FY2003		FY2004		FY2005		FY2006		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	%	Census
Allegany	0	0.0%	0	0.0%	0	0.0%	1	1.1%	0	0.0%	0	0.0%	0.2%	0.2%
Anne Arundel	0	0.0%	1	0.6%	0	0.0%	0	0.0%	0	—	0	—	0.3%	0.3%
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3%
Baltimore Co.	0	0.0%	0	0.0%	2	0.7%	0	0.0%	2	0.8%	0	0.0%	0.4%	1.0%
Calvert	0	0.0%	0	0.0%	0	0.0%	2	2.4%	0	0.0%	0	0.0%	0.4%	0.6%
Caroline	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.4%
Carroll	0	0.0%	3	0.6%	1	0.2%	1	0.2%	1	0.3%	1	0.7%	0.3%	0.2%
Cecil	0	—	0	0.0%	1	1.3%	1	1.7%	3	4.5%	5	7.8%	3.4%	0.3%
Charles	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.8%
Dorchester	0	—	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.2%
Frederick	0	0.0%	0	0.0%	3	3.0%	1	1.4%	0	0.0%	0	0.0%	1.0%	0.2%
Garrett	0	0.0%	1	0.4%	1	0.3%	1	0.3%	2	0.8%	2	1.4%	0.5%	0.1%
Harford	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.6%	2	3.4%	1.0%	0.2%
Howard	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	2.4%	1	1.3%	0.7%	0.1%
Kent	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0.2%	0.1%
Montgomery	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.9%	0	0.0%	0.1%	0.2%
Prince George's	0	—	0	0.0%	0	0.0%	2	1.0%	1	0.4%	0	0.0%	0.3%	0.2%
Queen Anne's	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.2%	0.5%	0.2%
St. Mary's	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.3%
Somerset	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.4%	0	0.0%	0.1%	0.4%
Talbot	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.2%
Washington	0	0.0%		0.0%	1	0.8%	1	1.2%	1	1.1%	0	0.0%	0.6%	0.2%
Wicomico	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.2%
Worcester	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0.2%
Maryland	0	0.0%	5	0.2%	9	0.2%	10	0.4%	16	0.7%	13	0.7%	0.4%	0.3%

— = Did not provide any screenings

Source: DHMH Cancer Screening Database, March 2007; US Census, 2000

Table D-22. Number of Cancer Coalition Members That Indicated Race/Ethnicity in CPEST Programs from FY2002 to FY2006, by Jurisdiction

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006
Allegany County	50	39	50	22	22
Anne Arundel County	0*	0*	—	20	0*
Baltimore City	—	135	161	163	—
Baltimore County	37	33	29	29*	29
Calvert County	0*	0*	23	18	19
Caroline County	0*	21	27	14	27
Carroll County	25	29	28	23	21
Cecil County	0*	0*	0*	37	34*
Charles County	51	62	61	69	68
Dorchester County	0*	26	24	—	37
Frederick County	33	37	27	36	32
Garrett County	0*	22	22	24	21
Harford County	37	27	43	35	37
Howard County	24	25	—	27	27
Kent County	0*	—	—	26	25
Montgomery County	69	74	60	60	59
Prince George's County	39	21	27	58	38
Queen Anne's County	0*	68	59	30	31
St. Mary's County	0*	29	28	11	10
Somerset County	17	20	33	42	27
Talbot County	0*	39	42	50*	43*
Washington County	0*	27	26	22	26*
Wicomico County	30	45	46	38	52
Worcester County	29	28	29	29	27
Maryland	374	807	855	883	712

— = Missing

* = A discrepancy exists between coalition membership and number of members indicating race/ethnicity

Source: Annual Cancer Program Grant Proposals

Table D-23. Percentage of African American Cancer Coalition Members in CPEST Programs from FY2002 to FY2006 and 2000 U.S. Census, by Jurisdiction

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	26.0%	20.5%	30.0%	22.7%	18.2%	5.3%
Anne Arundel County	—	—	—	15.0%	—	13.6%
Baltimore City	—	57.0%	60.9%	50.3%	—	64.3%
Baltimore County	16.2%	24.2%	20.7%	20.7%	20.7%	23.2%
Calvert County	—	—	21.7%	27.8%	31.6%	12.5%
Caroline County	—	23.8%	33.3%	57.1%	33.3%	14.8%
Carroll County	28.0%	24.1%	7.1%	4.3%	4.8%	2.3%
Cecil County	—	—	—	5.4%	8.8%	3.9%
Charles County	39.2%	35.5%	24.6%	33.3%	38.2%	26.1%
Dorchester County	—	38.5%	37.5%	—	48.6%	28.4%
Frederick County	18.2%	29.7%	18.9%	16.7%	18.8%	6.4%
Garrett County	—	0.0%	0.0%	0.0%	0.0%	0.4%
Harford County	10.8%	18.5%	23.3%	5.7%	13.5%	9.3%
Howard County	20.8%	16.0%	—	18.5%	18.5%	15.8%
Kent County	—	—	—	53.8%	60.0%	17.4%
Montgomery County	26.1%	25.7%	30.0%	30.0%	28.8%	14.9%
Prince George's County	51.3%	33.3%	51.9%	51.7%	50.0%	65.7%
Queen Anne's County	—	5.9%	8.5%	16.7%	35.5%	8.8%
St. Mary's County	—	17.2%	14.3%	27.3%	30.0%	13.9%
Somerset County	47.1%	40.0%	48.5%	52.4%	44.4%	41.1%
Talbot County	—	17.9%	19.0%	28.0%	18.6%	15.4%
Washington County	—	18.5%	11.5%	13.6%	15.4%	7.8%
Wicomico County	13.3%	22.2%	19.6%	23.7%	28.8%	23.3%
Worcester County	37.9%	32.1%	27.6%	31.0%	40.7%	16.7%
Maryland	30.5%	28.6%	30.5%	31.1%	28.7%	27.9%

— = Could not be calculated

Source: Annual Cancer Program Grant Applications; US Census, 2000

Table D-24. Percentage of Hispanic/Latino Cancer Coalition Members in CPEST Programs from FY2002 to FY2006 and 2000 U.S. Census, by Jurisdiction

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	0.0%	2.6%	0.0%	0.0%	0.0%	0.8%
Anne Arundel County	—	—	—	0.0%	—	2.6%
Baltimore City	—	1.5%	3.1%	3.7%	—	1.7%
Baltimore County	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%
Calvert County	—	—	0.0%	0.0%	0.0%	1.9%
Caroline County	—	4.8%	0.0%	0.0%	0.0%	2.7%
Carroll County	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Cecil County	0.0%	—	—	0.0%	0.0%	1.5%
Charles County	—	3.2%	3.3%	1.4%	2.9%	2.3%
Dorchester County	—	3.8%	4.2%	—	2.7%	1.3%
Frederick County	3.0%	0.0%	0.0%	2.8%	0.0%	2.4%
Garrett County	—	0.0%	0.0%	0.0%	0.0%	0.4%
Harford County	0.0%	3.7%	7.0%	8.6%	5.4%	1.9%
Howard County	8.3%	4.0%	—	0.0%	0.0%	3.8%
Kent County	—	—	—	0.0%	0.0%	2.8%
Montgomery County	17.4%	16.2%	18.3%	18.3%	18.6%	13.3%
Prince George's County	12.8%	19.0%	3.7%	10.3%	13.2%	9.9%
Queen Anne's County	—	0.0%	0.0%	0.0%	0.0%	1.1%
St. Mary's County	—	6.9%	3.6%	9.1%	10.0%	2.0%
Somerset County	5.9%	5.0%	3.0%	2.4%	3.7%	1.3%
Talbot County	—	0.0%	0.0%	0.0%	0.0%	1.8%
Washington County	—	0.0%	0.0%	0.0%	0.0%	1.2%
Wicomico County	3.3%	8.9%	4.3%	5.3%	3.8%	2.2%
Worcester County	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
Maryland	5.6%	4.0%	3.2%	3.6%	3.5%	4.3%

— = Could not be calculated

Source: Annual Cancer Program Grant Applications; US Census, 2000

Table D-25. Percentage of Asian American Cancer Coalition Members in CPEST Programs from FY2002 to FY2006 and U.S. 2000 Census, by Jurisdiction

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	2.0%	2.6%	4.0%	4.5%	0.0%	0.5%
Anne Arundel County	—	—	—	5.0%	—	2.3%
Baltimore City	—	0.0%	2.5%	3.7%	—	1.5%
Baltimore County	8.1%	12.1%	10.3%	10.3%	10.3%	3.9%
Calvert County	—	—	0.0%	0.0%	5.3%	0.8%
Caroline County	—	0.0%	0.0%	0.0%	0.0%	0.5%
Carroll County	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Cecil County	—	—	—	0.0%	2.9%	0.7%
Charles County	7.8%	4.8%	8.2%	5.8%	5.9%	1.8%
Dorchester County	—	0.0%	0.0%	—	0.0%	0.7%
Frederick County	3.0%	2.7%	2.7%	2.8%	3.1%	1.7%
Garrett County	—	4.5%	4.5%	4.2%	0.0%	0.2%
Harford County	2.7%	11.1%	2.3%	2.9%	2.7%	1.5%
Howard County	20.8%	16.0%	—	14.8%	14.8%	10.2%
Kent County	—	—	—	0.0%	0.0%	0.5%
Montgomery County	0.0%	10.8%	5.0%	5.0%	5.1%	13.3%
Prince George's County	15.4%	9.5%	14.8%	12.1%	15.8%	4.0%
Queen Anne's County	—	2.9%	3.4%	3.3%	0.0%	0.6%
St. Mary's County	—	3.4%	3.6%	0.0%	0.0%	1.8%
Somerset County	0.0%	0.0%	3.0%	2.4%	3.7%	0.5%
Talbot County	—	0.0%	0.0%	0.0%	0.0%	0.8%
Washington County	—	0.0%	0.0%	4.5%	0.0%	0.8%
Wicomico County	3.3%	4.4%	4.3%	5.3%	3.8%	1.7%
Worcester County	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Maryland	5.3%	4.0%	3.5%	4.2%	3.8%	4.0%

— = Could not be calculated

Source: Annual Cancer Program Grant Applications; US Census, 2000

Table D-26. Percentage of Native American Cancer Coalition Members in CPEST Programs from FY2002 to FY2006 and 2000 U.S. Census, by Jurisdiction

Jurisdiction	FY2002	FY2003	FY2004	FY2005	FY2006	Census
Allegany County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Anne Arundel County	—	—	—	0.0%	—	0.3%
Baltimore City	—	3.7%	3.1%	15.3%	—	0.3%
Baltimore County	24.3%	6.1%	3.4%	3.4%	3.4%	1.0%
Calvert County	—	—	0.0%	0.0%	0.0%	0.6%
Caroline County	—	0.0%	0.0%	0.0%	0.0%	0.4%
Carroll County	0.0%	0.0%	3.6%	0.0%	0.0%	0.2%
Cecil County	—	—	—	0.0%	2.9%	0.3%
Charles County	2.0%	1.6%	1.6%	1.4%	1.5%	0.8%
Dorchester County	—	0.0%	0.0%	—	0.0%	0.2%
Frederick County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Garrett County	—	0.0%	0.0%	0.0%	0.0%	0.1%
Harford County	2.7%	3.7%	2.3%	2.9%	2.7%	0.2%
Howard County	0.0%	0.0%	—	0.0%	0.0%	0.1%
Kent County	—	—	—	0.0%	0.0%	0.1%
Montgomery County	8.7%	0.0%	0.0%	0.0%	0.0%	0.2%
Prince George's County	5.1%	9.5%	7.4%	3.4%	5.3%	0.2%
Queen Anne's County	—	0.0%	1.7%	0.0%	3.2%	0.2%
St. Mary's County	—	0.0%	3.6%	0.0%	0.0%	0.3%
Somerset County	0.0%	0.0%	3.0%	4.8%	7.4%	0.4%
Talbot County	—	0.0%	0.0%	0.0%	0.0%	0.2%
Washington County	—	0.0%	0.0%	0.0%	0.0%	0.2%
Wicomico County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Worcester County	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Maryland	4.8%	1.4%	1.6%	3.6%	1.3%	0.3%

— = Could not be calculated

Source: Annual Cancer Program Grant Applications; US Census, 2000

Appendix E: Grantee-Level MOTA Program Tables

Table E-1. Number of Estimated and Actual Minority Recruits and Attendees to Tobacco and Cancer Coalitions for FY2004, by MOTA Grantee and Minority Group

MOTA Grantee	Minority Recruits (Actual)*					Est.	Actual	Minority Attendees (Actual)*					Est.	Actual
	AA	NA	Asian	H/L	W			AA	NA	Asian	H/L	W		
Respect Foundation, Inc.	0	0	0	0	0	3	0	3	0	0	0	0	4	3
Associated Black Charities	2	9	0	6	0	12	17	15	4	2	5	0	12	26
TAA Foundation, Inc.	8	2	6	7	2	4	25	6	0	2	2	1	4	11
Union Bethel AME Church	8	0	0	1	0	2	9	7	0	0	0	1	4	8
Black Leadership Council for Excellence	27	2	0	10	0	18	39	22	0	0	1	0	5	23
Associated Black Charities—Dorchester	46	0	0	4	3	4	53	16	0	0	1	1	8	18
Inner County Outreach	1	0	0	0	0	12	1	5	0	0	2	1	7	8
Baobab Tree Project, Inc.	6	0	3	2	2	8	13	5	0	4	4	1	4	14
Bethel AME Church of Chestertown	3	0	0	0	0	5	3	40	0	0	0	0	12	40
Washington Chiefs	39	0	2	1	9	4	51	32	2	2	1	6	24	43
Maryland Center at Bowie State University	16	3	3	1	0	19	23	23	0	3	1	0	12	27
Community Relief Program	0	0	0	0	0	2	0	4	1	1	1	0	8	7
TriLife Christian Center	2	0	0	0	0	3	2	27	0	0	0	2	20	29
Brothers United Who Dare to Care	18	4	0	1	0	4	23	15	0	0	4	0	4	19
Save the Youth	8	0	0	0	1	1	9	7	0	0	0	0	3	7
Total	184	20	14	33	17	101	268	227	7	14	22	13	131	283

*AA = African American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman

Source: MOTA Statistical Performance and Project Reports, 2004-2006

Table E-2. Number of Estimated and Actual Minority Recruits and Attendees to Tobacco and Cancer Coalitions for FY2005, by MOTA Grantee and Minority Group

MOTA Grantee	Minority Recruits (Actual)*					Est.	Actual	Minority Attendees (Actual)*					Est.	Actual
	AA	NA	Asian	H/L	W			AA	NA	Asian	H/L	W		
Respect Foundation, Inc.	3	0	0	0	0	3	3	6	0	0	0	0	4	6
Associated Black Charities—Baltimore	0	1	0	2	0	12	3	19	5	1	8	0	12	33
TAA foundation, Inc.	4	3	2	2	0	4	11	6	3	2	2	0	4	13
Union Bethel AME Church	0	2	0	0	2	2	4	4	2	0	0	2	4	8
Black Leadership Council for Excellence	1	0	1	0	0	18	2	20	0	2	0	0	23	22
Associated Black Charities—Dorchester	0	0	0	0	0	1	0	5	0	0	0	0	8	5
FMH Wellness Center	0	1	0	1	1	5	3	3	5	0	1	9	12	18
Inner County Outreach	2	0	0	1	0	7	3	22	0	0	0	0	16	22
Bethel AME Church	4	0	0	1	0	2	5	11	0	0	1	0	4	12
Holy Cross Hospital	2	0	1	5	0	0	8	5	0	4	16	0	20	25
Maryland Center at Bowie State University	0	1	0	0	0	6	1	8	0	0	0	0	12	8
Community Relief Program	0	0	0	0	0	2	0	3	0	1	0	0	12	4
TriLife Christian Center	6	0	0	0	0	4	6	19	0	0	0	0	30	19
St. James AME Zion Church	1	0	0	1	1	5	3	6	0	0	0	0	20	6
Total	23	8	4	13	4	64	52	137	15	10	28	11	181	201

*AA = African American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman
Source: MOTA Statistical Performance and Project Reports, 2004-2006

Table E-3. Number of Estimated and Actual Minority Recruits and Attendees to Tobacco and Cancer Coalitions for FY2006, by MOTA Grantee and Minority Group

MOTA Grantee	Minority Recruits (Actual)*					Est.	Actual	Minority Attendees (Actual)*					Est.	Actual
	AA	NA	Asian	H/L	W			AA	NA	Asian	H/L	W		
Respect Foundation, Inc.	0	0	0	0	0	6	0	0	0	0	0	0	2	0
Associated Black Charities—Baltimore	0	0	0	0	0	5	0	9	11	1	4	1	4	26
TAA foundation, Inc.	1	0	0	0	0	2	1	3	2	3	1	0	6	9
Union Bethel AME Church	2	0	0	0	0	4	2	8	0	0	0	2	5	10
Black Leadership Council for Excellence	6	0	0	0	0	1	6	17	0	2	0	0	4	19
Associated Black Charities—Dorchester	0	0	0	0	0	10	0	8	0	0	0	2	6	10
FMH Wellness Center	0	0	3	0	0	2	3	1	8	2	0	6	2	17
Inner County Outreach	3	1	0	0	0	4	4	6	0	0	1	0	4	7
Bethel AME Church	0	0	0	0	0	1	0	29	0	0	0	0	3	29
Holy Cross Hospital	4	0	2	7	0	10	13	20	0	19	19	1	5	59
Maryland Center at Bowie State University	2	0	2	0	0	1	4	3	0	3	0	0	8	6
Scotts United Methodist Church	4	0	0	1	0	2	5	22	0	0	0	0	10	22
Brothers United Who Dare to Care	1	0	0	0	0	5	1	7	0	0	0	0	4	7
St. James AME Zion Church	0	0	0	0	0	1	0	6	0	0	0	0	12	6
Total	23	1	7	8	0	54	39	139	21	30	25	12	75	227

*AA = African American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman
Source: MOTA Statistical Performance and Project Reports, 2004-2006

Table E-4. Number of Estimated and Actual Educational/Focus Groups Held (and Reach for FY2005 and FY2006), by MOTA Grantee and Fiscal Year

MOTA Grantee	FY2004		FY2005			FY2006		
	Estimated	Actual	Reach	Estimated	Actual	Reach	Estimated	Actual
Respect Foundation, Inc.	10	11	417	10	14	480	10	20
Associated Black Charities—Baltimore	6	68	719	17	53	498	18	41
TAA Foundation, Inc.	0	3	14	3	1	15	3	2
Union Bethel AME Church	0	6	0	3	0	0	0	0
Black Leadership Council for Excellence	6	7	62	6	2	87	6	4
Associated Black Charities—Dorchester	6	21	167	10	7	372	3	35
FMH Wellness Center	—	—	230	6	15	987	13	28
Inner County Outreach	7	4	254	10	4	9	10	4
Baobab Tree Project, Inc.	8	12	—	—	—	—	—	—
Bethel AME Church	2	2	82	3	2	0	3	0
Holy Cross Hospital	—	—	74	12	12	560	12	57
Washington Chiefs	2	14	—	—	—	—	—	—
Maryland Center at Bowie State University	0	6	0	2	0	1,987	2	80
Community Relief Program	0	0	0	2	0	—	—	—
Scotts United Methodist Church	—	—	—	—	—	1,482	10	11
TriLife Christian Center	0	1	51	1	4	—	—	—
Brothers United Who Dare to Care	0	4	—	—	—	105	1	11
St. James AME Zion Church	—	—	67	4	3	0	6	0
Save the Youth	7	6	—	—	—	—	—	—
Total	54	165	2,137	89	117	6,582	97	293

— = Grantee was not funded during Fiscal Year

Source: MOTA Statistical Performance and Project Reports, 2004-2006

Note: Reach was not reported in FY2004

Table E-5. Number of Estimated and Actual Grant Writing Workshops Conducted and Reach for FY2005 and FY2006, by MOTA Grantee and Fiscal Year

MOTA Grantee	FY2004		FY2005			FY2006		
	Estimated	Actual	Reach	Estimated	Actual	Reach	Estimated	Actual
Respect Foundation, Inc.	0	0	0	0	0	0	0	0
Associated Black Charities—Baltimore	2	2	0	1	0	39	0	1
TAA foundation, Inc.	2	2	14	2	1	0	0	1
Union Bethel AME Church	3	2	40	0	4	22	0	2
Black Leadership Council for Excellence	2	1	25	2	3	170	0	7
Associated Black Charities—Dorchester	4	7	0	1	0	190	2	6
FMH Wellness Center	—	—	0	0	0	0	0	0
Inner County Outreach	6	4	1	1	1	0	0	0
Baobab Tree Project, Inc.	0	0	—	—	—	1	0	1
Bethel AME Church	0	0	0	0	0	0	0	0
Holy Cross Hospital	—	—	0	0	0	5	0	1
Washington Chiefs	2	11	—	—	—	—	—	—
Maryland Center at Bowie State University	1	2	0	0	0	0	0	15
Community Relief Program	0	0	0	0	0	—	—	—
Scotts United Methodist Church	—	—	—	—	—	22	1	1
TriLife Christian Center	2	1	10	1	1	—	—	—
Brothers United Who Dare to Care	0	0	—	—	—	0	0	0
St. James AME Zion Church	—	—	21	—	1	1	0	1
Save the Youth	0	0	—	—	—	—	—	—
Total	24	32	111	8	11	450	3	36

— = Grantee was not funded during Fiscal Year

Source: MOTA Statistical Performance and Project Reports, 2004-2006

Note: Reach was not reported in FY2004

Table E-6. Number of Estimated and Actual Cultural Diversity Fairs and/or Events Conducted and Reach for FY2005 and FY2006, by MOTA Grantee and Fiscal Year

MOTA Grantee	FY2004		FY2005			FY2006		
	Estimated	Actual	Reach	Estimated	Actual	Reach	Estimated	Actual
Respect Foundation, Inc.	0	0	600	2	3	10,489	4	20
Associated Black Charities—Baltimore	3	14	1,784	1	14	4,579	1	25
TAA foundation, Inc.	0	1	10,220	1	3	3,765	1	25
Union Bethel AME Church	2	3	634	2	6	1,620	6	25
Black Leadership Council for Excellence	0	6	2,590	6	7	6,186	1	11
Associated Black Charities—Dorchester	0	10	0	1	0	1,579	4	19
FMH Wellness Center	—	—	1,580	0	12	10,876	7	14
Inner County Outreach	1	2	1,111	5	5	8,479	1	10
Baobab Tree Project, Inc.	0	3	—	—	—	—	—	—
Bethel AME Church	1	1	0	2	1	1,408	1	9
Holy Cross Hospital	—	—	3,644	3	25	10,459	1	40
Washington Chiefs	0	8	—	—	—	—	—	—
Maryland Center at Bowie State University	4	3	57,408	4	25	15,298	10	24
Community Relief Program	3	0	0	5	0	—	—	—
Scotts United Methodist Church	—	—	—	—	—	4,789	1	39
TriLife Christian Center	0	5	705	3	6	—	—	—
Brothers United Who Dare to Care	2	7	—	—	—	2,479	1	39
St. James AME Zion Church	—	—	1,067	12	20	2,970	1	22
Save the Youth	0	0	—	—	—	—	—	—
Total	19	57	81,343	30	102	84,976	40	322

— = Grantee was not funded during Fiscal Year

Source: MOTA Statistical Performance and Project Reports, 2004-2006

Note: Reach was not reported in FY2004

Table E-7. Number of Training Sessions on Understanding RFAs and RFPs and Reach for FY2005 and FY2006, by MOTA Grantee and Fiscal Year

MOTA Grantee	FY2004	FY2005		FY2006	
	Sessions	Reach	Sessions	Reach	Sessions
Respect Foundation, Inc.	0	0	0	0	0
Associated Black Charities—Baltimore	5	10	2	160	7
TAA foundation, Inc.	2	14	1	23	1
Union Bethel AME Church	1	0	0	0	0
Black Leadership Council for Excellence	7	Missing	3	35	5
Associated Black Charities—Dorchester	13	0	0	35	3
FMH Wellness Center	—	121	4	0	0
Inner County Outreach	1	1	1	—	—
Baobab Tree Project, Inc.	1	—	—	—	—
Bethel AME Church	0	0	0	0	0
Holy Cross Hospital	—	0	0	0	0
Washington Chiefs	13	—	—	—	—
Maryland Center at Bowie State University	2	0	0	0	0
Community Relief Program	0	0	0	—	—
Scotts United Methodist Church	—	—	—	—	—
TriLife Christian Center	1	10	1	0	0
Brothers United Who Dare to Care	4	—	—	2	2
St. James AME Zion Church	—	1	1	2	2
Save the Youth	0	—	—	—	—
Inner County Outreach	—	—	—	0	0
Total	50	170	13	257	20

— = Grantee was not funded during Fiscal Year

Source: MOTA Statistical Performance and Project Reports, 2004-2006

Note: Reach was not reported in FY2004

Table E-8. Technical Assistance Sessions on Applying for Grants and Grant Awards Resulting in FY2004, by MOTA Grantee and Minority Group

MOTA Grantee	Attendees to TA*					Total Sessions	Organizations Receiving Grant Awards*					Total Awards
	AA	NA	Asian	H/L	W		AA	NA	Asian	H/L	W	
Respect Foundation, Inc.	0	0	0	0	0	0	0	0	0	0	0	0
Associated Black Charities	29	7	8	14	4	30	4	4	2	1	0	11
TAA Foundation, Inc.	17	0	11	8	1	3	0	0	0	0	0	0
Union Bethel AME Church	2	0	0	1	2	3	6	0	0	0	2	6
Black Leadership Council for Excellence	5	0	0	7	0	12	3	0	0	0	0	3
Associated Black Charities—Dorchester	37	0	0	0	3	40	13	0	0	0	1	13
Inner County Outreach	0	0	0	0	0	0	0	0	0	0	0	0
Baobab Tree Project, Inc.	0	0	0	0	0	0	0	0	0	0	0	0
Bethel AME Church of Chestertown	0	0	0	0	0	0	0	0	0	0	0	0
Washington Chiefs	10	0	4	9	4	17	0	0	0	0	0	0
Maryland Center at Bowie State University	18	11	3	4	0	3	11	1	2	2	0	16
Community Relief Program	0	0	0	0	0	0	0	0	0	0	0	0
TriLife Christian Center	6	0	0	0	1	1	0	0	0	0	0	0
Brothers United Who Dare to Care	19	4	0	7	0	17	4	1	0	1	0	6
Save the Youth	0	0	0	0	0	0	0	0	0	0	0	0
Total	143	22	26	50	12	126	41	6	4	4	3	55

*AA = African American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman
Source: MOTA Statistical Performance and Project Reports, 2004-2006

Table E-9. Number of Technical Assistance Sessions on Applying for Grants and Grant Awards Resulting in FY2005, by MOTA Grantee and Minority Group

MOTA Grantee	Attendees to TA*					Total Sessions	Organizations Receiving Grant Awards*					Total Awards
	AA	NA	Asian	H/L	W		AA	NA	Asian	H/L	W	
Respect Foundation, Inc.	0	0	0	0	0	0	0	0	0	0	0	0
Associated Black Charities	2	1	1	2	0	4	0	0	0	0	0	0
TAA Foundation, Inc.	6	2	3	1	1	1	0	0	0	0	0	0
Union Bethel AME Church	10	0	0	4	5	4	0	0	0	0	0	0
Black Leadership Council for Excellence	18	1	1	0	0	8	1	0	0	0	0	1
Associated Black Charities—Dorchester	7	0	0	0	0	6	0	0	0	0	0	0
FMH Wellness Center	0	0	0	0	0	0	0	0	0	0	0	0
Inner County Outreach	1	0	0	0	0	1	0	0	0	0	0	0
Baobab Tree Project, Inc.	0	0	0	0	0	0	0	0	0	0	0	0
Bethel AME Church	0	0	0	0	0	0	0	0	0	0	0	0
Holy Cross Hospital	0	0	0	0	0	0	0	0	0	0	0	0
Maryland Center at Bowie State University	1	0	0	0	0	1	0	0	0	0	0	0
Community Relief Program	10	0	0	0	0	1	0	0	0	0	0	0
TriLife Christian Center	1	0	0	0	0	1	0	0	0	0	0	0
Total	56	4	5	7	6	27	1	0	0	0	0	1

*AA = African American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman
Source: MOTA Statistical Performance and Project Reports, 2004-2006

Table E-10. Number of Technical Assistance Sessions on Applying for Grants and Grant Awards Resulting in FY2006, by MOTA Grantee and Minority Group

MOTA Grantee	Attendees to TA*					Total Sessions	Organizations Receiving Grant Awards*					Total Awards
	AA	NA	Asian	H/L	W		AA	NA	Asian	H/L	W	
Respect Foundation, Inc.	0	0	0	0	0	0	0	0	0	0	0	0
Associated Black Charities—Baltimore	5	2	3	3	0	7	0	1	0	0	0	1
TAA foundation, Inc.	11	1	5	1	15	1	1	0	0	0	0	1
Union Bethel AME Church	13	0	0	0	4	2	0	0	0	0	1	1
Black Leadership Council for Excellence	15	0	4	0	0	7	0	0	0	0	0	0
Associated Black Charities—Dorchester	32	0	0	0	1	38	1	0	0	0	0	1
FMH Wellness Center	0	0	0	0	0	0	0	0	0	0	0	0
Inner County Outreach	3	2	0	0	0	7	1	1	0	0	0	2
Bethel AME Church	8	2	2	2	0	10	1	0	0	0	0	1
Holy Cross Hospital	0	0	0	0	0	0	0	0	0	0	0	0
Maryland Center at Bowie State University	0	0	0	0	0	0	0	0	0	0	0	0
Scotts United Methodist Church	7	0	0	2	3	5	4	0	0	2	0	6
Brothers United Who Dare to Care	2	0	2	0	0	4	0	0	0	0	0	0
St. James AME Zion Church	3	0	0	0	0	3	0	0	0	0	0	0
Total	99	7	16	8	23	84	8	2	0	2	1	13

*AA = African American; NA = Native American; Asian = Asian American; H/L = Hispanic/Latino; W = Woman
Source: MOTA Statistical Performance and Project Reports, 2004-2006

Appendix F: Jurisdiction-Level Overall Program Administration Tables

Table F-1. Number of Individual and Total Site Visits Conducted by the Cancer Program, by Jurisdiction and Fiscal Year

Jurisdiction	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Allegany County	0	1	1	1	1	4
Anne Arundel County	0	1	1	1	0	3
Baltimore City (UM/JHU)	2	2	2	2	2	10
Baltimore County	0	1	1	2	1	5
Calvert County	1	1	1	1	1	5
Caroline County	0	1	1	1	1	4
Carroll County	0	1	1	1	1	4
Cecil County	0	1	1	2	1	5
Charles County	0	0	1	1	1	3
Dorchester County	0	1	1	1	1	4
Frederick County	1	1	1	1	0	4
Garrett County	0	1	1	1	1	4
Harford County	1	1	1	1	1	5
Howard County	0	1	1	1	1	4
Kent County	1	1	1	1	1	5
Montgomery County	0	1	1	1	1	4
Prince George's County	0	1	1	1	1	4
Queen Anne's County	0	1	1	1	1	4
St. Mary's County	0	1	1	1	1	4
Somerset County	0	1	1	1	1	4
Talbot County	0	1	1	1	1	4
Washington County	1	1	1	1	1	5
Wicomico County	0	1	1	1	1	4
Worcester County	1	1	1	1	1	5
Total	8	24	25	27	23	107

Source: Information provided by DHMH

Table F-2. Number of Individual and Total Site Visits Conducted by the Tobacco Program, by Jurisdiction and Year

Jurisdiction	2001	2002	2003	2004	2005	Total
Allegany County	0	0	0	0	1	1
Baltimore City	0	0	0	0	1	1
Baltimore County	0	0	0	0	1	1
Frederick County	0	0	0	0	1	1
Harford County	0	0	0	0	1	1
Kent County	0	0	0	0	1	1
Prince George's County	0	0	1	0	0	1
Queen Anne's County	0	0	1	0	0	1
Talbot County	0	1	1	0	1	3
Washington County	0	0	0	0	1	1
Wicomico County	0	0	0	0	1	1
Total	0	1	3	0	9	13

Source: Tobacco program site visit reports

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